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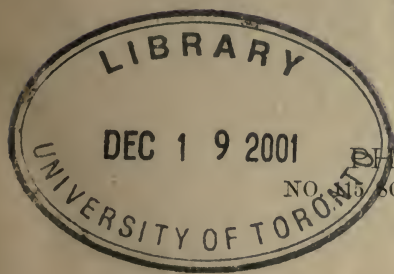
D. G. BRINTON, M. D.

AND

JOSEPH F. EDWARDS, M. D.

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COMMUNICATIONS.

MEDICAL SYMBOLISM.

BY T. S. SOZINSKEY, M. D.,
Of Philadelphia.

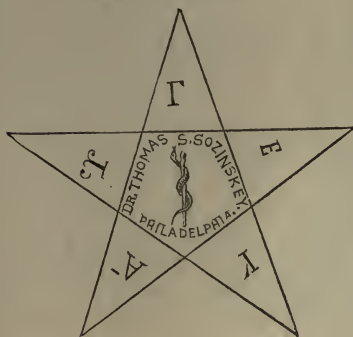


FIG. 1.

It has been well said by some one that things are not always what they seem. In the interesting and extensive field of symbolic knowledge this is, of all places, most emphatically true. Here is a figure (No. 2). Ask an uninitiated person to



FIG. 2.

look at it and state what he sees, and his reply will likely be, "A snake partly coiled, resting on a pedestal." That is, indeed, simply what it is; but to the initiated it is representative of another and far different thing. Before such a figure, many a human being, diseased and suffering, has prostrated himself and offered up supplications for relief; to generations of the people of the Eternal City, and

regions far from, as well as near to, the famous Tiber, it appeared a god, the great god of "the divine art." It is a symbol of medicine.

In my incursions into the field of symbolic knowledge, I have made notes, among which are some pertaining to medicine. But little appearing to be generally known about medical symbolism, it has occurred to the Editor of the REPORTER, as well as myself, that an article on the subject would be read with pleasure and profit by many. I do not propose to treat the matter, however, either systematically or exhaustively; such treatment of it would require much space; but I will endeavor, in a somewhat desultory way, to go into it sufficiently to instruct a little, as well as show that it is an interesting study.

Now, to begin with, I deem it proper to define a few terms, the meaning of which should be understood, or confusion of ideas will likely be experienced. In giving the article the title of "Medical Symbolism," I have intended the word symbolism to be taken in its widest sense; I desire it to be taken as of much the same signification as emblem is popularly; that is, a figure having a different meaning besides the visible one—a meaning which to be perceived calls for exercise of the imagination. Mackenzie* and other authorities, however, hold the word emblem to be properly applicable only to a figure of two or more parts. In a device there is a motto which the picture portrays more or less clearly. Allegory is almost synonymous with emblem, in its restricted sense, and is used only in reference to a composite figure, the chief consideration in which is the beauty of form. In an allegorical figure, or composition,

* Royal Masonic Cyclopædia.

the elements of it are attributes, some of which are essential and some conventional. Essential attributes alone are, strictly speaking, symbols. Thus in a representation of the Goddess of Liberty, the cap is not a symbol, it is a conventional attribute. If a poppy be taken to represent sleep, it is a symbol. In Fairholt's work* and others, the serpent in medicine is said not to be a symbol; but this is not true, if it be taken to represent the god of medicine, which was done, as I have intimated above, by the Romans. Evidently, if the word symbol were taken as of this narrow meaning, there are very few general medical symbols. In taking it, as I do in this article, to be of much the same meaning as emblem, a word applicable to any mystic figure or any kind of attribute, I do no more than Fairholt says it would be wise to always do. Any figure, then, having another besides its ordinary signification, may be regarded as a symbol.

I have said that the god of medicine was represented and worshipped by the Romans in the form of a snake or serpent; this curious creature was regarded by them as being, to all intents and purposes, *Æsculapius* himself. As is very generally known, medicine did not receive a great deal of attention, by that extraordinary people, until a comparatively late date. It was in the year 293 before the Christian era that a move was made to introduce the worship of the god of medicine. This was ordered by the Sibylline Books, in order to cut short a great pestilence. How this was done we are graphically told by Ovid.† It is a remarkable story and must be known, if one would understand, according to some, the reason why the god was given the serpentine form, the serpent being generally regarded as only an attribute of him at his chief residence, the great *Æsclepiion* or Temple of Health at Epidaurus, his birthplace. A commission on sailing around to the Grecian city, to bring home with them the god, were led for some reason or other to believe that a snake, or rather viper, which entered the ship, was the divine personage they were sent for. On returning with this precious being on board, it, or rather he, took up his abode on an island‡ in the Tiber, where he was subse-

quently worshiped, a great temple being erected for him.

What species of serpent it was which played the important part just indicated, is an interesting matter. In Pliny's work it is said: "The *Æsculapian* snake was first brought to Rome from Epidaurus, but at the present day it is very commonly reared in our houses even, so much so, indeed, that if the breed were not kept down, by the frequent conflagrations, it would be impossible to make head against the rapid increase of them." From this statement one may justly infer that it was not a decidedly venomous snake. A species of viper still common in Italy is believed to be the identical reptile. It reaches a length of about two feet. It has been described under the name of Columbar *Æsculapii*. It is spoken of under this name in Cuvier's great work.* That learned naturalist says that it is more bulky and not so long as the col. elaphsas, or four-striped adder, and continues, "It is brown above; strawy yellow beneath and on the sides; and the scales of the back are nearly smooth." After the brief description he adds, "It is that which the ancients have represented in their statues of *Æsculapius*; and it is probable that the serpent of Epidaurus was of this species. N. B.—The col. *æsculapii* of Linnæus is a totally different species, and belongs to America." The columbar *æsculapii*, Sh. is closely related, if not identical with the viper communis, or pelias berus, of which Figuier says,† "It is not improbable that it is the *echis* of Aristotle and the *vipera* of Virgil, as it is the *manaso* of the Italians, the *adder* of the country people of England and Scotland, and the *vipère* of France."

It, of course, follows from what has just been said that the adder spoken of is the serpent which should always be shown in medical symbolism.

I would ask the reader to turn with me now to the shore of the Saronic bay, to the Peloponnesian city Epidaurus, a place dearer than Salerno, or even Cos, to every lover of the annals, historical and legendary, of the healing art. There is but little about it at present to indicate its ancient glory.‡ But for the ruins in the vicinity and the imperishable records we have of them, one would

names indicate, on islands of comparatively small size. I need hardly say that there are excellent sanitary reasons for placing hospitals in the country, and especially on insular sites.

* Op. cit.

† Le Règne Animal.

‡ Reptiles and Birds.

§ Vide Leake's "Travels in the Morea."

* A Dictionary of Terms of Art.

† Metamorphoses, b. xv.

‡ In his "Historia Naturalis," Pliny states that "Temples of Health were placed by the Romans without the city, and afterwards on an island." This was customary with the Greeks, too. They did not relish much more than the Romans having such institutions in their midst. The Epidaurian Oracle was without the town, and other notable ones, such as Rhodes, Cnidus and Cos, were, as the

not care to linger long about the scraggy village. It is chiefly the pages of Pausanias,* that observing and inquisitive old Grecian traveller, which tell the physician most of what is interesting to him about the place. On the plain five miles or so west of the town, was the great seat of worship of Æsculapius, the primary and perhaps greatest temple of the god of medicine, to which crowds came for ages from all parts of Greece. The Epidaurian oracle is gone; it is silent as the vanished millions who sought the means of health and life from it; but an impress of it is still felt, and will last forevermore. To this long-renowned sanatory retreat one must turn who wishes to become acquainted with the most important of medical symbols.

The statue of Æsculapius, at Epidaurus, was a remarkable piece of work, by Thrasymedes. Time has put it, with many another treasure, out of sight. It consisted of ivory and gold. When Pausanias visited the place, which was in the second century of our era, he drew from the inhabitants an interesting account of it. The figure was manly and handsome, Zeus-like. It was seated on a throne. One hand rested on the head of a serpent, and in the other was a staff. By the side of the god, lay a dog. In this, one has a very expressive allegorical representation of the healing art.

The statues of Æsculapius were, for the most part, ideal, and as might consequently be expected, varied greatly in their details; but there was a serpent connected with each of them, in one way or another. In some the great healer is represented as a bearded old man. The beard was occasionally absent, which I think was wise; for the conscientious physician should have nothing about him, which he can dispense with, which would serve to spread disease. It is said that Dionysius, king of Sicily, on conquering the Morea, ordered the golden beard to be taken off the Epidaurian god, for the peculiar reason that "it was unbecoming and unjust for the son to have a beard when the father [Apollo] had none." In the famous colossal head now and since 1866 in the British Museum, which seems to be that of a splendidly developed man in his prime (what it should be as that of the image of an ideal physician), the beard is of but moderate length, and is waved like the somewhat long hair. This noble remnant of Greek art, one of the finest in the museum, which is saying a great deal, Nichols † regards "as scarcely less remarkable"

than the celebrated "Venus of Milo" in the Louvre, both of which were found, the former in 1828, in the island of Melos, and came originally, it is surmised, from Cnidus, the seat of an æsclepiion, with those of Rhodes and Cos, of great renown in the fifth century before the Christian era.

In the left hand of some figures of the god there is a scroll—a very appropriate symbol—and in connection with not a few representations of him, a little child, or dwarf, wrapped in a mantle, stood by his side. Occasionally a cock, or crow, or goat, was given.

As I have said, a serpent was always shown in the representations of Æsculapius. It is, in some cases, coiled around a post,* by the side of which the god stands, and in some it is coiled around a staff, which he holds in his hand. The staff is sometimes given as knotty.

In this connection I may speak specially about the staff and snake, as it is usually designated, of the god, about which there seems to be considerable misconception and confusion prevailing. As I have stated, the serpent is only sometimes represented as coiled around the staff, an attribute, indeed, which is not always present. Now, when the staff is given bearing a serpent, it must not be regarded as a magic wand, for Æsculapius had nothing of the kind. A very different personage, Mercury, had a wand, or rather caduceus, which, strange to say, is taken by many to be a symbol of medicine. That is, Mercury's caduceus, which is not of medical import at all, is accorded to Æsculapius, who really had none. I repeat, there is no such a thing as an Æsculapian wand, if



wand be taken as meaning a rod or staff possessed of mysterious power. A staff with a serpent twined around it, however, is an expressive medical symbol. It may properly be regarded as an emblem of Æsculapius. I give a good example in Fig. 3, copied from a plate in De Wilde's rare old work.† The serpent may be taken as a symbol of the god, and the staff as one to indicate the perambulatory character of the physician's calling. Regarding the knots as expressive of difficulties in the art and practice

FIG. 3. of medicine is very fanciful, but not infrequently done.

I deem it not amiss to give a cut (Fig. 4), of the caduceus of Mercury, in the hope of better removing misapprehension in regard to it. It is

* Itinerary of Greece (Ællados Periegesis).

† Handybook of the British Museum, 1870. An excellent engraving of the head appears as the frontispiece.

* This, or even the staff, may be a remnant of tree-worship. Vide infra.

† Gemmæ Selectæ. Amsterdam, 1703.

given as shown, but not very correctly, on a seal used by the United States Marine Hospital Service.



FIG. 4.

It is an appropriate trade symbol, Mercury being the god of commerce as well as the messenger of the gods; but it is more especially a symbol of peace, the god being the great peace-maker. Traditional history relates that in his rambles one day, he saw two snakes fighting, and laying his

wand, which was originally an olive branch, between them, was delighted to discover that it had the power of putting an end to the encounter. Hence the presence on the wand of the two serpents, which, of course, it would be wise to represent as belligerent. Mercury being an adept thief, was regarded as the god of rogues; from which fact taking his caduceus as a symbol of medicine is a left-hand sort of compliment to the physician, even if he is one who regards his profession chiefly as a trade. And this brings to mind a very truthful remark of Bacon*, namely, "If physic be a trade, it is the trade of all others the most exactly cut out for a rogue." Another function of Mercury, which I may mention, was to attend to dying persons, to unloose their souls and drive "them down the Stygian waves," as we are told by Virgil.† It is hardly a part of the physician's proper function, I submit, to do that.

How to account for the association of the serpent with the god of medicine is a trifle puzzling to many.‡ Saying that it is symbolic of prudence and renovation is not quite satisfactory, although it may be properly taken as of such import. "As wise as a serpent," is an everyday saying. Casting of the skin is said to be the basis of the idea of renovation or rejuvenescence. Taking it as expressive of the idea of convalescence is not out of the way, for it undergoes, every spring, a remarkable change from a state of lethargy to one of active life, under the strengthening rays of Apollo himself, as will be seen later, the original Grecian god of medicine. This notion is well portrayed in Mrs. Palliser's interesting work,|| in the device of the Rinovati Academy.

The commonness of a tame, but somewhat ven-

omous serpent, the adder already spoken of, about and in the Epidaurian Temple of Æsculapius, has been advanced as explaining the association of the reptile with medicine. This may have had something to do with it.

After referring to some strange curative virtues, attributed to vipers, Pliny* says: "Hence it is that the snake is consecrated to Æsculapius." Here is one of the examples given by the rather credulous old Roman: "It is a well-known fact that all injuries inflicted by serpents and those even of an otherwise incurable nature, it is an excellent remedy to apply the entrails of the serpent itself to the wound." The principle is evidently the same as that illustrated in applying a hair of the dog to cure the wound caused by the animal.

Still another reason for the association has sprung from the reputed power of the serpent to discover herbs of curative virtues. This is largely based on a traditional episode in the history of Æsculapius, which reminds one of the German story of the Snake Leaves, told by Grimm.† It seems that on one occasion while thinking what treatment to resort to in the case of one of his patients, Glancus, a serpent appearing and twining itself around his staff, he killed it, whereupon another came, bearing in its mouth an herb with which it restored the dead one to life. The god used the same herb with similar effect on the human subject. The miraculous feature of this explanation puts it on a par with such as one would expect from the Indians, whose "medicine man," too, is apt to have a snake at hand, as he is also, I may say, to make himself bird-headed,‡ reminding one of the Egyptian Thoth, and others.

I am of the belief, however, that the remarkable association of the serpent with the god of healing must be largely explained in yet another way. There is good reason to hold that we have in it a remnant of serpent-worship, a wonderfully wide-spread cultus, still kept up by the Nagas (literally snakes) of India,|| and others. Epidaurus was open to frequent communication with Egypt, where the serpent played a great religious role, being in different forms representative of good and evil. Says Sharpe in his excellent little

* Advancement of Learning.

† Æneid, b. iv.

‡ It is worth while to remark that, in his life of Cleomenes, Plutarch states that it was believed that after death evaporation of "the marrow" produces serpents, and that "the ancients knowing this doctrine, appropriated the serpent, rather than any other animal, to heroes."

|| Historic Devices, Badges and War-cries.

* Op. cit.

† Household Tales.

‡ Vide engraving in "False Gods" by F. S. Dobbins.

|| Says Dr. Birdwood, in his "Indian Arts": "The worship of the snake still survives everywhere in India, and at Nagpur was until very recently a public danger, from the manner in which the city was allowed to be overrun with cobras."

work,* "The venomous snakes and those that were not venomous were alike honored, the first as the gods of evil, and the second, as gods or rather goddesses of good." The serpent of good is always represented as prevailing. The creator of the world was given a serpentine form. The sect of Gnostics, called Ophites, taking the world to be evil, attributed its creation to the serpent of evil, Eve's acquaintance. Evil in the shape of disease might be expected to be overcome by the serpent of good.

(To be continued.)

A RARE FORM OF RETINAL AFFECTION.

BY M. LANDESBURG, M. D.,
Of Philadelphia.

Mooren† first drew the attention of the medical profession to a peculiar form of retinal affection, which he saw but in one instance during the long term of his ophthalmic practice, and of which no mention had been made before in the oculistic literature. This affection, which he calls "retinitis punctata albescens," was characterized by innumerable punctate, whitish spots, resembling crystals of cholesterine, which were spread over the whole retina. The communication of Mooren's unique case was very soon followed by the report of one similar case, made by Kuhnt, and of three others by Hirschberg, to which has lately been added one case by Swan M. Burnett. As a further contribution to the knowledge of this rare and highly interesting form of retinal affection, I beg leave to present the following three cases:

Case 1. Bookkeeper H., 53 years old, applied to me, August 26, 1877, on account of a dark spot in the centre of the visual field of his right eye, which has gradually developed during the last six weeks, greatly impairing vision. Examination showed:

Right Eye.— $M = \frac{1}{40}$. $V = \frac{15}{40}$. With the naked eye Jaeger 9, with convex 10 Jaeger 4. The visual field, measured at one foot distance from the perimeter, is of normal extent in its outlines, but shows in its centre a ring-shaped scotoma of sixteen lines in diameter. The color-perception within this scotoma is entirely abolished for red and green, and slightly impaired for blue. White is perceived as dirtyish-gray. Pupil and tension are normal. The optic disc is of pinkish color, with well-defined border and normally arranged

vessels. The region between the optic disc and macula lutea is thickly studded with numerous, minute, yellowish-white points and dots, which appear in groups and isolated, leaving free the track of the vessels. On the inner border of the macula lutea there is a small, irregularly-shaped, whitish-glistening spot, and close to the latter a flat extravasation of blood. A somewhat larger extravasation of blood is situated below the inner border of the optic disc. The retinal tissue of this area is slightly veiled by a delicate diffuse opacity, and presents a dull-reddish hue. The faint exudation shades off into the adjacent retina, which altogether with the whole remaining surface shows absolutely normal condition. Only one inferior branch of the ophthalmic vein is slightly tortuous and hyperæmic. All blood-vessels can be followed up to their finest ramifications.

Left Eye.—Amaurosis. Refracting media transparent. Optic disc atrophic; blood-vessels very thin and totally obliterated towards the macula lutea. The region between the latter and the optic disc is occupied by numerous, minute, darkish-brown spots and dots, which slightly raise from a striated and dirty-brownish surface, through which the choroidal vessels can be faintly seen. The retinal elements are totally destroyed in this area, the irregular outlines of which are bordered with a darkish rim. There are no other anomalies on the retina.

General health has always been good. There is no history of syphilis or malaria. Liquors are not used at all; tobacco but moderately. Urine is normal, of acid reaction and of specific gravity of 1018.

The only assignable cause of the loss of his eyesight patient can give is the poor, inadequate light, under which he has been obliged to do heavy work through long years. The right eye, which has been blind for two years, has begun suffering under similar symptoms, to those under which its fellow is now laboring.

My treatment consisted in the use of mild derivatives and syrupus Giberti in moderate doses, in connection with periodical applications of fleurel-loups. The improvement of the morbid process progressed slowly but steadily. The first change for the better was noticed in the condition of the scotoma, which gradually became brighter, smaller and more transparent, and finally contracted to a fine, pellucid spot, which remained in the centre of the visual field long after the color-perception had been restored to its normal condition, and vision had increased to $\frac{1}{2}$. The improvement in the functional disturbances was, however, not

* Egyptian Mythology.

† See "Five Lustra of Ophthalmic Practice." Wiesbaden, Bergman, 1882.

attended with any material change in the morbid process proper of the retina. The latter remained in full height until the fifth week of treatment, when vision had reached $\frac{1}{2}\%$ and scotoma had considerably diminished. Then only reparation commenced, starting with the absorption of the retinal exudation, which now proceeded very rapidly. The retrogressive course of the yellowish-white points and dots began at the seventh week of treatment, after vision had reached $\frac{1}{2}\%$ and scotoma had entirely vanished. The points and dots faded but gradually, disappearing from the view only at the end of the twelfth week of treatment. The extravasations of blood remained longest, and winter passed off before absorption had completed its course. A few pigment deposits were the only traces of the affection left on the retina.

Case 2. Butcher G., 39 years old, applied to me February 7, 1880, on account of central obscuration in the visual field of his right eye, which has developed during the last few days. Examination showed:

Right Eye.— $V=\frac{2}{3}\%$. Jaeger 7. Visual field normal in its outlines, but showing central scotoma of elliptiform shape, the axes of which, measured at one foot distance from the perimeter, are respectively 15 and 9 lines in length. Within this scotoma the color-perception is totally lost. White appears gray. Refracting media are transparent. Optic disc, peri-papillary border and vessels are normal. Inside from the optic disc, at a distance from the latter of two papillæ in diameter, there are numerous ecchymoses, clustered close to each other in radiating streaks, which form a crescentic figure, with the opening towards the macula lutea. The retinal tissue between the ecchymoses and macula lutea is slightly infiltrated and swollen, and covered with numerous minute fatty-glistening spots, which are either isolated or in groups. There are no morbid changes in the macula lutea itself, but the latter is dark red, and shows in its lower border a fine hemorrhagic effusion. The whole remaining surface of the retina is covered by a very delicate, diffuse opacity, and sprinkled over with numerous white, opalescent dots, which, however, keep aloof from the course of the retinal blood-vessels. The latter are normal. Only one venous branch, which, emerging from the optic disc, runs downwards, and turns abruptly to the macula lutea, is slightly hyperæmic and tortuous.

Left eye is normal.

Patient is a perfectly healthy man, of robust constitution. There is no history of syphilis, or of

intemperance either in liquors or tobacco. Urine is normal, of acid reaction, and of specific gravity of 1019. No assignable cause of the affection can be given.

The result of the treatment with subcutaneous injections of muriate of pilocarpine (half a grain *pro dosi*) was as follows:

After the Twelfth Injection.— $V=\frac{3}{3}\%$. Scotoma separated into two lateral halves, leaving entirely free the fixation-point.

After the Twentieth Injection.— $V=\frac{2}{3}\%$. Instead of the scotoma there are only two delicate lateral shadows, which do not impair vision. They entirely vanish after a short time. The white dots on the retina have faded but very little. The color of the macula lutea is slightly reddish, and the hemorrhagic effusion in course of absorption. The region between the macula lutea and the optic disc has regained its transparency, and the white deposits have disappeared in some parts, while they have only become fainter and sparser in others. The crescentic figure, formed by the striated extravasations of blood near the optic disc, has broken into small reddish spots and points, raising from a reddish-gray base.

With this condition of his eye patient is discharged from treatment April 20th. The favorable result remains stationary. The pathological changes in the background of the eye subside but slowly, leaving finally no other alterations on the retinal tissue but a few pigment-spots.

Case 3. Merchant L., 51 years old, applied to me, December 19, 1882, with the complaint that a cloud has developed during the last few weeks before his left eye, which greatly interferes with the central fixation of objects. The vision of his right eye has also failed, although morbid symptoms proper have not yet come into notice. Examination shows:

External appearance of either eye normal. Vision of the left eye $\frac{1}{3}\%$, of the right eye $\frac{1}{2}\%$. The right eye reads with the help of convex 10 Jaeger 1, the left eye only Jaeger 4. The outlines of the visual field in either eye are limited upwards and inwards, to a greater extent in the left eye. The latter, shows besides a central scotoma of oval shape, the axes of which, measured at one foot distance from the perimeter, are 13 respectively 8 lines in length. Within this scotoma the color-perception is lost for red and green, and slightly impaired for blue. The right eye presents a small area around the fixation point, within which the principal colors appear somewhat fainter than in the other parts of the visual field. Refracting media are normal in either eye.

Left Eye.—Optic disc and blood-vessels normal. Peri-papillary region distinct. The inner border of the optic disc is surrounded, wall-like, by numerous, striated, linear extravasations of blood, closely aggregated to each other. The whole region between the striated extravasations and the macula lutea is occupied by numerous, minute, whitish-yellow points, which raise, either isolated or in groups, from a gray-reddish and slightly infiltrated surface. Inside from the macula lutea, almost touching its border, there is a corona of punctiform ecchymoses, with a whitish speck in its centre. The fovea centralis itself contains a small pinkish spot. In the vicinity of the morbid deposits the veins mostly are dark-red and tortuous, the arteries thin. Some vessels, which run directly from the optic disc to the affected parts of the retina, are veiled by the retinal infiltration. The remaining surface of the retina with its vessels presents no anomaly whatever.

Right Eye.—Optic disc and vessels normal. Peri-papillary region distinct. Two minute, linear extravasations of blood are situated upwards and inwards from the papillary border, and several larger ones near the macula lutea, the color of which is dark-red. On the space between the macula lutea and the optic disc there are scattered about ten to twelve whitish dots; two somewhat larger, yellowish and fatty glistening spots are situated near the macula lutea. The retinal tissue in this region is slightly infiltrated, and the veins are hyperæmic. The remaining surface of the retina is absolutely normal.

Patient is a healthy man of robust constitution, whose organs are in perfect order. Urine is normal, of acid reaction, and of specific gravity of 1019. He is in all other respects temperate but in the use of tobacco, in which he has immoderately indulged for many years past. He smokes daily from about fifteen to twenty very strong and large cigars. No other cause of the affection could be elicited. Starting from the supposition that the abuse of tobacco might stand in direct connection with the affection, I tried to prevail upon the patient to refrain from his bad habit, but to no purpose. His passion was stronger than his will. The conclusion would certainly be too rash that the abuse of tobacco had had nothing to do with the affection; but on the other hand, we cannot shut our eyes to the fact that treatment had the effect to cure the trouble, notwithstanding the injurious influence continued to act in full force.

The application of fleur-le-loups, to which I first resorted, had the following result:

AFTER THE FIRST APPLICATION.

December 26.—Vision of the left eye $\frac{1}{20}$. The cloudiness before the eye much brighter. Central scotoma smaller and more pellucid.

Vision of the right eye $\frac{1}{20}$.

AFTER THE SECOND APPLICATION.

January 5, 1883.—Vision of the left eye $\frac{1}{4}$. Cloudiness almost subsided. The central scotoma is replaced by a fine shadow, within which there is a dullness for the finer shades of colors, whereas the principal colors are correctly distinguished. Vision of the right eye $\frac{1}{20}$. Perception of colors and fixation-point normal.

January 13.—Vision $\frac{1}{2}$ with either eye. Binocular vision $\frac{1}{20}$. Field of vision normal in either eye. The central shadow in the left eye is brighter and more pellucid.

The morbid alterations in the retina are in the course of resorption in the right eye, but unchanged in the left one.

AFTER THE THIRD APPLICATION.

January 18.—Vision of the right eye $\frac{1}{2}$. Ecchymoses fainter, thinner, and partly resorbed; the whitish-yellow dots have considerably faded.

Vision of the left eye $\frac{1}{20}$. Pathological deposits in the retina unchanged. Two fresh, small extravasations of blood near the macula lutea. The central shadow more opaque. The principal colors appear fainter and dimmer. Field of vision normal.

The diaphoretic treatment to which I now resorted, in combination with small doses of bichloride of mercury, had the most favorable result.

March 22, examination showed:

Vision of the right eye $\frac{1}{20}$. The white dots totally resorbed; only a few traces of the extravasations of blood. The affected part of the retina restored to normal condition.

Vision of the left eye $\frac{1}{20}$. Scotoma vanished. Color-perception normal. Pathological changes in the retina in full progress of resorption. The whitish dots less numerous and but thinly scattered in the vicinity of the macula lutea. The latter presents normal appearance. The radiated ecchymoses partly resorbed; the larger extravasations of blood flatter and brighter. The veins less tortuous, the arteries more filled up.

In this condition of his eyes patient reassumes in full the duties of his business, and withdraws from any further control.

2006 Arch street, Philadelphia.

—Mr. Lister has been offered and has accepted a baronetcy.

A NEW BATTERY SOLUTION.

BY CARL SEILER, M. D.,

Lecturer on Diseases of the Throat and Nose and Instructor in Laryngology at the University of Pennsylvania.

Every one who has had much to do with batteries for medical purposes and for the galvanocautery, in which bichromate of potash solution is used in connection with sulphuric acid as the exciting fluid, has been annoyed by the formation of ruby-colored crystals. These crystals, which are very hard and insoluble in cold water, cover the surface of the zinc plates, and are formed in the interstices of the carbons, besides forming a thick and hard crust at the bottom and at the sides of the cup containing the fluid. They are more readily formed in cold weather than during the warm season, and can be dissolved only by boiling water. Being non-conductors of electricity, they increase the resistance of the carbons to such an extent as to materially interfere with the proper action of the battery, and thus often only a feeble current is obtained from a powerful instrument. These crystals, commonly called chromo-alum, are, in reality, a double salt of chromo-sulphate of potash, the combination being favored by the electric current and by exposure of the elements of the battery to the air.

The reader, not well versed in the chemistry of batteries, may ask, Why not leave out the bichromate of potash, and only use a solution of sulphuric acid and water? The answer to this question will explain the chemistry of the new solution. When two elements, say a carbon and zinc plate, are placed in a jar containing acidulated water, and are above the solution connected by a wire, an electric current is established, which decomposes some of the water into its constituents, hydrogen and oxygen. The former, together with the acid, enters into combination with the zinc, while the oxygen, in the form of small bubbles, adheres to the surface of the carbon, and being a non-conductor of electricity, soon stops the action. This is termed polarization. In order to prevent this, or at least reduce it to a minimum, a substance is added to the solution, which has a strong affinity for the oxygen, and thus prevents the coating of the carbon plate. There is, perhaps, no better deoxidizer known than chromic acid, and as it forms a large part of the cheap commercial salt bichromate of potash, this is added to the sulphuric acid and water to form the battery solution. It is, therefore, the chromic acid which acts, being set free from its combination with the potash by the action of the sulphuric acid, and we thus have a solution of sulphate of potash and of chromic

acid, with a surplus of sulphuric acid and water, in our existing fluid. If pure chromic acid instead of bichromate of potash is used in making the fluid, no crystals can be formed, since no potash is present; but the crystallized chromic acid is a very expensive article, costing nearly \$2 per pound at wholesale rates. A crude non-crystallized chromic acid can however readily be made, and when added to the sulphuric acid and water will give excellent results, the plates remaining free from all crystals, and the fluid retaining its full force to the very last. A fluid made according to the following formula has given me great satisfaction in my galvanocautery battery, and it can be used, diluted one-half with water, for the ordinary medical batteries:

Bichromate of potash,	2 pounds.
Hot water,	$\frac{1}{2}$ gallon.
Sulphuric acid,	$\frac{1}{2}$ gallon.

Dissolve the bichromate of potash in hot water, and when cool add to it the sulphuric acid. This should be mixed in an earthen vessel, as the sudden evolution of heat is very apt to break a glass bottle. When cold, place the mixture, which will be quite thick, in a glass funnel, the tube of which is partly closed with asbestos, and drain off all mother liquor, which is a saturated solution of sulphate of potash. Then re-dissolve the parts remaining in the funnel in $1\frac{1}{2}$ gallons of water, and add to it 2 quarts of sulphuric acid if the fluid is to be used for the galvanocautery battery; but if it is for the ordinary medical battery, 1 quart of sulphuric acid is sufficient.

1346 Spruce street.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

BY WILLIAM PEPPER, M. D., LL. D.,

Provost and Professor of Clinical Medicine in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

Infantile Paralysis.

GENTLEMEN: The first patient which I shall show you to-day is this child. The mother gives us the following history: She has had two children, one of whom died of cholera infantum. This little girl is nine months old. About the middle of July (five months ago), it was seized with general paralysis, and could move neither its hands nor feet. This was preceded for a few days by feverishness and restlessness. This condition of general paralysis lasted for two days. She then began to regain power in the right arm and left leg. Motion returned to the arm sev-

eral days before it did to the leg. In the course of three or four weeks, she began to use the left hand. Further than this, there has been no improvement in the ability to move the limbs. She has had no spasm of any kind, nor has she had any injury sufficient to suggest a traumatic origin of this paralysis. She had not been exposed to wet or dampness at any time.

This is an example of infantile paralysis, but it differs from ordinary cases of this disease, in the fact that the paralysis has been so general. As you are aware, infantile paralysis commonly comes on about this period of life, that is, during the first dentition, somewhere between the ages of twelve and thirty-six months. The causes of this affection are obscure. It sometimes undoubtedly comes from direct exposure and severe chilling of the body, but in many cases, it comes on without any apparent adequate cause. It is usually preceded by just such symptoms as those described by the mother of this child. For a few days, the child will evidently be unwell, feverish, restless, indisposed to be moved, crying and fretting, with a poor appetite, and perhaps with some little gastric disturbance, as is shown by vomiting. The child is, perhaps, put to bed in this condition without any evidence of paralysis, but in the morning it will be found to be paralyzed. The disease comes on then after an uncertain period of indefinite sickness, which is evidently sympathetic with the trouble in the spinal cord.

This case illustrates very distinctly another common feature of infantile paralysis, namely, that nearly always the loss of power is greatest at the beginning of the attack. The paralysis affects a larger number of members or muscles than remain permanently paralyzed, so that after a few days the paralysis begins to clear up and those parts which have been least affected regain their power, leaving a certain number to be permanently paralyzed, or paralyzed for a longer period.

In this child, neither the bladder nor the rectum have been involved. This is the usual history. The deeper portions of the cord where the fibres going to the bladder and the rectum traverse, are not, as a rule, involved in the disease; for, as you know, the seat of the lesion in infantile paralysis is in the anterior horn of gray matter of the cord, and in the anterior column in this vicinity. The condition in the beginning is one of congestion, irritation, and swelling. We can, therefore, readily understand that in these parts where the lesion is less severe, it may pass away leaving no organic change, and thus we may have cases of infantile paralysis which recover completely in the course of two or three weeks, more commonly owing to the extreme sensitiveness of the spinal system. At this early age we find that some part of the spinal cord is so badly hurt that it undergoes degeneration and atrophies, or at least tends to do so. In such cases, the paralysis becomes permanent, and is followed by wasting of the affected muscles. Thus it is that this disease is often called atrophic infantile paralysis, because it is so frequently followed by wasting of the muscles which remain palsied; but this again depends upon the extent to which the anterolateral column and anterior horn of the cord have been injured by the original cause. This may

leave a more chronic trouble, which will pass away, leaving the integrity of the cord unimpaired; or it may be followed by wasting of the large multi-polar cells, which have a trophic influence upon the muscles, and this wasting is followed by atrophy of the corresponding group of muscles.

Let us now examine the condition of the affected muscles in this case. The child can move the right arm and hand very well. When an object is presented to her left hand, she tries to raise the arm to grasp it, but she is unable to do so, as the muscles of the shoulder and arm are paralyzed. When I put the object in her hand she clutches it firmly, showing that the flexor and extensor muscles of the hand have regained their power. This case well illustrates the way in which the disease dissects out particular muscles or groups of muscles, apparently without reference to their position. Here we find the shoulder and humeral muscles of the left side involved, and naturally, we should expect to find the muscles of the hand affected in the same way; but it is not so. There is considerable power in the right leg, and during the past few days the child has regained some power over the left limb. There has as yet hardly been time for much wasting of the muscles to take place, but I find that the muscles around the shoulder are decidedly wasted. As long as the muscles have not atrophied, you should never despair of a perfect cure. The case may keep on improving even after it has lasted for a long time. When the muscles have wasted there is great reason to fear that they cannot be restored to their natural condition.

In treating the early stage of this disease, I think that it is well to act upon the supposition that there is irritation and congestion of the spinal cord. Counter-irritation along the spine and the use of ergot, belladonna and iodide of potassium internally, are indicated. At a later stage of the disease, when as much of the paralysis as will clear away has passed off, and there remains only the permanent paralysis which is associated with a serious lesion of the spinal cord, this line of treatment does not produce good results. We then have to depend upon remedies to promote the general nutrition, as iron and cod-liver oil, with correct hygiene, taking great care that the child is dressed properly and not exposed to dampness, draughts, etc. Friction of the skin should be employed to maintain the circulation, for the child cannot take that incessant exercise by which young children maintain a healthy condition of their muscles and functions. In addition to this, there should be treatment especially directed to the paralyzed parts, hoping that the tone of the spinal centres will be sufficient to enable them to maintain their integrity and prevent disintegration and atrophy of the nerve cells, which will be followed by wasting of the corresponding muscles. I do not know that we have any remedy that specially influences the nutrition of these important nerve cells. Strychnia has no effect upon them, but acts only upon the motor nerves and the muscles. It is proper to use strychnia at a late period of the case, and it may be administered by the mouth or hypodermically, being injected into the affected muscles. The object of this treatment is to improve the nu-

trition of the muscle, and not to act upon the spinal cord. Massage, friction and passive movements should also be employed with the same object. The circulation of the skin should be stimulated by friction and warm clothing. Good results are often obtained by putting the affected member under an air pump and exhausting the air. The limb is as it were enclosed in a large cupping glass, a vacuum is created, and the blood is drawn into the part. This carefully repeated is frequently of service.

In private practice, we have scarcely the means of treating these patients as they should be treated. All that form of apparatus which has been brought to such perfection in Sweden serves an excellent purpose in the treatment of atrophic infantile paralysis.

Electricity is an important agent in the treatment of this affection, but its use requires judgment and skill. That current is employed which will give contractions of the paralyzed muscles, and the interrupted galvanic current is practically the only one which is of service. It is to be used of such a strength and with the current interrupted at such a rate, and applied over the nerve points, the nerves themselves, or the muscles, according as you get the best results. There is no fixed rule to be laid down for the use of electricity, save that the current should be moderate and used in such a way as to secure contractions of the affected muscles. As many of you know, there is a special form of reaction of the muscles to electricity, which, however, I shall not consider to-day, which indicates the approach of disintegration of the cord. It is a reversal of the normal relation of the muscles to the interrupted galvanic current, and the detection of this is, although not absolutely of unfavorable prognosis, a serious sign.

What we do for these cases in private practice is to promote nutrition by the use of iron, cod liver oil, later employ strychnia, keeping up friction of the skin, and training the parents in the use of massage and passive movements, carefully regulating all matters of hygiene, and if we have time and a suitable battery, apply the galvanic current in the way which I have suggested. These are cases which are more satisfactorily treated in institutions especially designed for this purpose, but the great objection to this treatment is its costliness, and we should have, in connection with our general hospitals, suitable apparatus for the treatment of these cases.

These cases require a long treatment, and if this is neglected the paralyzed muscles may pass into a condition of hopeless atrophy from disuse, and although the trophic centres of the cord may not be ruined by the original disease, the muscles from lack of proper treatment become hopelessly wasted.

Attention has been called to the projection of this child's stomach. Occasionally the dorsal muscles, or abdominal muscles, are paralyzed, allowing the body to fall in all directions, or great protuberance of the stomach when the child sits up. This is one of the rare cases in which there is paralytic distension of the abdomen. I have seen this condition on a number of occasions, although it has been recently described by a specialist as though it were something quite new.

Dupuytren's Contraction of the Tendons of the Hand, with Trembling.

Our next patient is a painter. He was born in Scotland, and came to this country two years ago. He comes with the statement that he has trembling of the right hand and contraction of the flexor tendons. Both his parents are living, and, as far as he knows, there is no gout or rheumatism in the family. He had two attacks of rheumatism before he came to this country, but the heart did not suffer in either attack. I refer to this point, because this contraction of the flexor tendons, which was described by Dupuytren, and is often called Dupuytren's contraction of the tendons, is one that I have commonly seen in persons of a gouty or rheumatic diathesis. It is often associated with sub-acute rheumatism. It comes on at different periods of life, but usually much later than that at which our patient presents it.

He has contraction of the tendons of the little and ring fingers of the right hand. The tendon is thickened, hardened, rigid, and evidently contracted; the fingers are more or less drawn, there is difficulty in fully expanding them, and when force is employed it excites pain. Occasionally this contraction will go on until all the tendons are involved and the hand is reduced to a state of characteristic deformity. It often happens that the affection is symmetrical. In its earliest stage, I have known it to yield to internal alterative treatment. Later, it becomes the subject for surgical treatment, but even after subcutaneous section of the tendon, it will, as a rule, be found that as long as the constitutional tendency continues, the disease will recur and the contraction again present itself.

The affection of the tendons in this patient is associated with trembling of the hand, and as he holds out his hand you see that it is the seat of a general trembling; it is not a fibrillar twitching, the whole member shaking, instead of there being a quivering of individual groups of fibres under the skin. You have probably had your attention called to those curious fibrillar twitchings which appear beneath the skin when the muscles are going to pass into a state of progressive atrophy. In that curious disease, progressive muscular atrophy, one of the earliest symptoms, occurring perhaps before the wasting of the muscle has progressed sufficiently to be recognized, is the appearance of this fibrillar quivering. This is quite distinct from the trembling which this patient presents. The left hand does not quiver as much as the right, and the tendons are not affected to the same extent.

He first noticed the trouble in the right hand about eighteen months ago. He has been engaged at painting for sixteen years. He has never had lead colic or other symptoms of lead poisoning. There is no blue line along the gums. During the past two years he has worked at painting cars, and in a great deal of his work, he cannot use a rest for the hand. Sometimes, when polishing the varnish, his hands are in cold water for one or two days at a time. During the past six months he has begun to use his left hand to some extent in striping, but he is sure that the trembling of the left hand came on before he began to employ it in this way.

The fact that this patient has been handling

lead in various ways for so long a time and has never had paralysis, neuralgia, colic, blue line on the gums, or other evidences of saturnine poisoning, led me to believe that this trembling is not dependent upon the action of lead, but is due to an affection of the sheath of the nerves, similar in character to that which has attacked the tendons. I may be wrong in this opinion, for as you know, the symptoms of lead poisoning are curiously diverse. This may be the result of the action of lead, but I am inclined to connect it with rheumatic tendency and the affection of the tendons.

It will be proper under the circumstances, to put this man on a treatment suitable for lead poisoning. If he can do it, he should give up painting; but as he probably cannot do that, he should keep his hands entirely away from lead, and when painting should, as much as he can, use a rest for the hand. He has been taking a tonic consisting of iron, quinine and strychnia; and also five grains of iodide of potassium three times a day. I would stop the tonic and increase the dose of iodide to ten grains in water on an empty stomach. With this I shall order ten drops of the juice of conium and increase the dose cautiously until we see whether or not it has a favorable effect on the muscular trembling.

Gastric Disturbance Probably Due to Incipient Cirrhosis of the Liver.

In this patient we are anxious to arrive at a correct diagnosis, and yet it is a difficult thing to do. He is a laboring man, 52 years of age. His statement is that he has always enjoyed good health, but has used liquor to excess. He states that the symptoms of the present sickness came on only six weeks ago, and expects us to believe that this appearance of extreme illness has been developed within that time. I find it difficult to do this. I think that it is more likely that he has failed to notice the disturbances which may have preceded the condition in which the symptoms have been more acute. For the past six weeks he has had frequent vomiting, has rapidly lost flesh and strength, and assumed this anæmic and cachectic appearance, and yet there has been no fever and no complaint of pain. He has not worked for twelve months, but had no trouble with digestion, and never had vomiting before six weeks ago. He vomits about once or twice a week, and usually in the morning. The matters vomited consist of "sour stuff," and sometimes in part of the food taken the previous evening, but there has never been any blood vomited. The bowels are opened without medicine about once in every three days. His best weight was 160 pounds. He thinks that he now weighs about 125 pounds. During the past six weeks he has lived chiefly on liquid food, taking about a quart of milk a day. If he takes solid food, it excites vomiting.

The rapid development of this vomiting makes it hopeful that it is not due to malignant disease. It may prove to be a case of ulcer of the stomach, but the absence of pain and tenderness, the period of the vomiting, occurring only in the morning, the character of the matters vomited, and the absence of blood, are all against the idea of ulcer. This leads us to hope that it may be one

of those cases of gastric catarrh with congestion of the liver, which may occur in a person broken down by imprudence in the use of liquor. Some of these cases very closely simulate carcinoma of the stomach, and will often give you considerable embarrassment. The fact that this is so should warn you against pronouncing an unfavorable diagnosis and prognosis. If you are unable to detect actual thickening or a distinct tumor, be careful how you are led by the severity of the symptoms, the failure of flesh and strength, and the appearance of emaciation, into the assertion that the patient has carcinoma. Of course, you are forced to consider this possibility; you may even be forced to suspect cancer; but beware how you communicate that suspicion to any other person, and you should carry out that treatment which would be of service if the disease were not malignant. If the disease is malignant, this is the line of treatment which will do the most good; whereas, if you allow yourself to hold the opinion that there is incurable organic disease of the stomach, you will lose heart, and if you tell the patient, he will of course feel that there is no use in pursuing any special line of treatment, at least with you, if you know beforehand that you are going to do him no good.

Let us now examine the stomach. The abdominal muscles are rigid, but by a little gentleness and perseverance, I am able to get my fingers down on the aorta, and if there was any distinct thickening of the walls of the stomach, I should certainly be able to detect it. The results as regards the stomach are therefore negative.

The dullness of the liver begins at the sixth rib, and does not extend below the border of the ribs. The liver is small. You have heard a great deal about the gastric symptoms of developing cirrhosis, and this is a condition which must constantly be borne in mind in diagnosing between gastric carcinoma and other causes of vomiting and wasting.

In view of the distinct history of alcoholism, the diminished area of hepatic dullness, and the absence of any demonstrable thickening or lump, I am disposed to explain this case as one of chronic gastric congestion and catarrh, connected with portal obstruction from incipient cirrhosis, rather than a case of carcinomatous disease of the walls of the stomach. Sometimes you will find grave symptoms developed, even when the condition of the liver is still entirely curable, and has not passed into an actual cirrhotic change.

I shall recommend this patient to continue the simple diet of milk and light cereals which he has employed during the past six weeks. All forms of alcohol are to be avoided. Internally I should recommend the use of bi-chloride of mercury with no other remedy, given moderately diluted on an empty stomach. I should begin with $\frac{1}{16}$ of a grain in two ounces of liquid, and gradually increase to $\frac{1}{4}$ of a grain three times a day, as it is tolerated and produces good results. In a month we shall be able to decide as to the effect of this treatment.

—Dr. Brand, of Stettin, was the first man to introduce (in 1861) the treatment of typhoid cases by cold baths.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Traumatic Peritonitis.

The patient is thirty-five years of age, a native of Ireland, married, and is employed as a stoker at the Metropolitan Gas Works, in this city. He was admitted to the hospital December 13. He gives a purely traumatic history. He was perfectly well until the night of December 12. He was then at work in the gas factory, and was struck violently in the abdomen with a heavy iron coal-shovel. Though suffering intense pain, he was taken home, and then he suffered from shock, and had a fever, followed by a profuse cold sweat during the night. He had no chill. There was great pain and tenderness in the abdomen, which continued until he was brought here, at 7 a. m., in a greatly prostrated condition. He has passed water this morning, but was not able to before. He has had no movement from the bowels since the injury was received. Has not been able to sleep because of pain and restlessness. The pain is increased on motion and by pressure. He finds greatest relief in the dorsal decubitus, and with his legs drawn up and knees flexed. On admission, his pulse was 111, respiration 28, and temperature 101.80. His urine was drawn off with a catheter, and it had a specific gravity of 1.028, contained no albumen or casts, had an acid reaction, and was of a light red color.

I do not doubt, gentlemen, that most of you have already determined from the history, that the patient has peritonitis, and a peritonitis due to a traumatic cause. And now the question arises whether this peritonitis is simply the result of a contusion of the walls of the peritoneal cavity, or whether some more serious injury has been done to the contents of the abdomen. Upon questioning the patient, and upon examination by palpation, it is found that the point of greatest pain and tenderness is to the right of the median line, and below the level of the umbilicus, that is, in the right iliac region, and it is found also that the force of the blow was received upon one side of the abdomen, and not directly in the median line.

Upon placing my hand over the abdomen, I not only find tenderness everywhere, but I get increased tenderness, and a sense of resistance to pressure and a dullness on percussion over the limited region I have described. It would seem, therefore, that the injury done, whatever it is, must have been inflicted upon some of the structures included between the median line and the ilium, and below the line of the umbilicus on the right side. In this region it is possible to conceive of an injury being inflicted upon a distended bladder, or upon the cæcum, or some portion of the intestines.

You remember that in the history it was said that although he was suffering intensely from pain caused by the blow, yet he was allowed to go home, and the evidences of a specially severe injury did not occur until after he got home, and these were the ordinary evidences of shock and prostration. He was brought here at the end of twelve hours after the injury, and was immedi-

ately put upon the opium treatment, and enough of the drug was given to him to relieve the pain. The progress of the case since has not been satisfactory, and this seems to make it more certain that the injury was of a more serious nature than a simple peritonitis from contusion, and that the force of the blow acted directly upon some of the abdominal viscera. Now I do not believe it was the bladder that was injured, because he had emptied it only three hours before the accident, so it could not then have been very full and distended. And besides, he has passed water since, which he could not have done if the bladder had been ruptured. He has not had any action from the bowels since he came in, and it has not been thought desirable to attempt to procure one, for there is no question as to the existence of intestinal obstruction here. I think it is possible that there has been a rupture either of the cæcum, the ascending colon, or some part of the small intestine, with an escape of its contents into the cavity of the peritoneum; and that explains the serious character of the peritonitis. From the rapid failure of the patient, and from the general character of the symptoms, I am therefore led to believe that we have here to deal with a peritonitis which is secondary to an injury of some abdominal organ. For if it were due to a simple contusion of the peritoneum, the prognosis would not be so serious.

I said that this man was put upon opium as soon as he came in. And this, as you know, has now become the classical treatment of peritonitis. It is a well recognized rule now, that the diagnosis of peritonitis being once established, you are to direct all your efforts to the controlling of the inflammation, and you are to wait until it has subsided before you attempt to treat the cause. This rule would not apply invariably to all such cases as come within the province of the surgeon, but it would apply to those cases where there is fecal obstruction, and a peritonitis depending upon a rupture of the intestines from typhlitis, typhoid fever, or other causes. The opium plan of treatment is now, I think, much more moderate in its application than it was when I was a student. Twenty-five years ago, when the plan of treating puerperal peritonitis by opium was first brought to the notice of the profession by Dr. Alonzo Clark, there was much interest excited; and there was a good opportunity for testing its efficacy, for there was about that time an epidemic of puerperal peritonitis, and there were many cases in the city. At that time opium was given in such large quantities that to watch its effects, the presence of a medical man of intelligence was rendered necessary, and so the physicians used to get medical students to come and sit by the bedside of the patient night and day, in order to watch the frequency of the respirations, which was the test by which the size of the dose was regulated. Dr. Clark was not satisfied with merely relieving pain and tenderness, but he thought it necessary to produce semi-narcotism. And it was found that there was an astonishing tolerance of this drug in patients suffering from this disease. For you could sometimes give them from a quarter of a grain to a grain of morphia every hour or two, and still keep them entirely conscious, but in a somnolent state, from which they could easily be

aroused. It was then thought safe to reduce the respirations to five or eight a minute if necessary. But I can tell you that, when you get a patient breathing only five times a minute, you had better proceed with some discretion. Yet I have seen the respirations reduced to seven in two minutes. But I can assure you that this is not a very pleasant condition of things to contemplate, especially if you have yourself administered the drug. Still, even with this amount of opium, the patient can be aroused and will answer questions intelligently. But accidents have occurred by carrying the narcotism so far, and I believe that most practitioners are now satisfied with a reduction of the respirations to twelve or fifteen a minute, and with simply making the patient comfortable; and for this purpose a much less quantity of opium is necessary. In most cases you need not give more than one grain every hour or two, and a safe plan is to begin with one grain every hour, and to repeat this dose until you get relief from pain, and after that to give it according to the necessity of the case. This patient has had fifty-eight minims of Magendie's solution since six o'clock this morning, that is, within nine hours and a half, which is equal to six minims, or one grain of opium per hour. His eyes are beginning to show the effect of the opium, for the pupils are considerably contracted, though not to pin-points by any means. He is also perspiring freely. One ounce of whisky per hour is being administered because of the rise of temperature. When you find this association of symptoms accompanied by a sudden rise of temperature you may be pretty certain of the result; for in peritonitis, as well as in cerebral diseases and apoplexy, a rise of temperature signifies that the end is approaching. Since this morning this man's temperature has run up from 101.4° to 104.2°, and his pulse is now 150 and respiration 15. Observe the characteristic position which the patient occupies, lying on his back, with his legs and thighs drawn up.

NOTES FROM THE PHILADELPHIA HOSPITAL.

Infantile Eczema.

Dr. W. H. Parish showed two cases. Both the children were apparently healthy, but were bottle fed, which was probably the cause of the eczema. This is an exceedingly troublesome disease to cure, and will oftentimes persist until you wish your patients were in Europe or in Florida. The scabs must be removed as fast as they form, and this can best be done by the aid of a starch poultice; when you remove it the scabs will come with it. To the raw surface apply benzoated oxide of zinc ointment; if there is much cutaneous irritation, dilute the ointment with $\frac{1}{4}$ vaseline. For chronic cases he uses an iodide of lead ointment, 10 grains to one ounce of cocoa butter. Internally, he will give Fowler's solution, one-half a drop thrice daily to a child aged seven months.

Deep Mammary Abscess.

Here was edema and swelling in the breast of a puerperal woman, who has had a chill. No fluctuation can be detected, but Dr. Parish will make an incision; for it will do no harm, even if there is no pus, and if there is, it will give it a vent and prevent it from burrowing. He did strike

pus, but had to go deep for it. There had been an escape of a few drops of pus from the nipple, which caused him to suspect its presence, in spite of the absence of fluctuation. The breast will be poulticed, and after the tenderness disappears he will strap it.

MEDICAL SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, December 6, 1883. The President, R. A. Cleeman, M. D., in the chair.

Dr. W. Goodell exhibited two cysts of the parovarium, and remarked: Both patients got well; he indeed had never lost a patient from whom he had removed a parovarian cyst. In both cases a correct diagnosis was made previous to the operation. One interesting diagnostic point was the complete absence of the *facies ovariana*. The color in the cheeks was good, and the countenance was free from the anxious expression present in cases of ovarian tumor. One tumor had existed for ten years, the other for one. Another important point in the differential diagnosis is not only the flaccidity of the tumor, but its variable degrees of flaccidity. Upon inspection, it is seen to reach to the sternum, and seems to occupy a large portion of the abdominal cavity, but where the hands are placed upon its sternal edge, it can be compressed to the level of the umbilicus. An ovarian cyst on the contrary is hard and uncompressible. Exceptions to this rule are very rare, that is, either a tense parovarian cyst, or a flaccid ovarian one. A third important distinguishing point is the long time—ten years in one case—which the tumor existed, and further, without marked deterioration of health. After being tapped these tumors usually refill, but occasionally they do not, and a cure is thus brought about. The fluid withdrawn has been in every case limpid and generally colorless, but it has sometimes had in his experience an emerald tint. These tumors are generally free from serious adhesions, but if in an operation for the removal of one, adhesions should exist where for any reason their forcible separation would be unadvisable, or the cyst were intra-ligamentous, he would not hesitate to leave the adherent portion of the cyst-wall, or the whole cyst itself, after making a big hole in it, as the fluid it secretes is bland and unirritating to the peritoneum.

Any one examining one of these cysts for the first time would consider it to be of ovarian origin; for it is only by patient search that the ovary can be found spread out over the cyst-wall. The microscope will decide with certainty in any other-wise doubtful case. The tumor is covered with a beautiful net-work of veins.

When a cyst of the parovarium exists on one side, the ovary of the opposite side is usually found to be diseased and should be removed. In these cases the remaining ovary was seen to be enlarged and the site of a small ruptured cyst was pointed out. The fallopian tube was also enlarged, and the terminal vesicle of the fallopian tube, or the hydatid of Morgagni was enlarged and cystic.

This hydatid sometimes attains the size of an orange, and often ruptures spontaneously without any bad effects. A few years ago one of these small cysts ruptured while he was making an examination of the patient to ascertain its character.

Dr. Goodell exhibited a

Cancerous Womb Removed per Vaginam.

In view of the very fatal statistics of the operation for the removal of the womb or the radical cure of uterine cancer, he had been unwilling to perform it. In most of the cases where the disease had been seen early enough by him to give a chance of success, the patient had been unwilling to take the risk. On one occasion, when every preparation had been made to operate, the patient had a convulsion, and an examination of the urine showed a high proportion of albumen, in consequence of which he refused to operate. About a month ago, Dr. Chas. W. Dulles called him in consultation to see a patient in whom the carcinomatous condition was limited to the anterior lip. The womb was movable. The case was put frankly before the patient, and all its dangers pointed out. The choice of them being given to her, she decided, after due consideration, to take the risks of the radical operation. The operation was not as difficult as he anticipated.

The first step in the operation was to scrape away all cancerous tissue and to sear the remaining surface with Paquelin's cautery. The vagina was then thoroughly cleansed. A stout thread was passed through the cervix, to draw down the womb, instead of using a volsellum, the handles of which would be in the way. A circular incision was made around the cervix, and the tissues were stripped up anteriorly and posteriorly to the reflection of the peritoneum, and laterally to the insertion of the broad ligaments. Finally, the peritoneum was opened, and the womb retroverted into the vagina by means of the obstetric crochet passed over the fundus. A strong thread was now passed through the body of the uterus, by means of which to manipulate it more easily. A ligature was now passed around the broad ligament of the right side and secured it *en masse*, and a second double ligature was passed through it and tied on opposite sides. This side of the broad ligament was then divided, the uterus drawn down and the ligament of the left side secured in a similar manner and divided. The vaginal wound was closed and dressed with iodoform and cotton. A frank peritonitis set in on the third day, and proved fatal on the fourth. The result made him doubtful whether the operation is ever justifiable; he, indeed, felt disposed to avoid it whenever possible.

Dr. E. E. Montgomery inquired about the feasibility of using the galvanic wire ecraseur to divide the broad ligament, keeping the wire at a low red heat and dividing the tissues slowly, and avoiding the necessity for a drainage tube. Another method which he had been revolving in his mind was by means of the galvanic knife to dissect out the uterus, leaving the peritoneum intact, thus imitating to a certain extent the operation of Dr. Marion Sims of scraping and the use of zinc chloride.

Dr. Goodell thought that Dr. Montgomery's galvanic wire would get too hot as the loop became small, and would then divide rapidly, like a knife,

and incur the danger of secondary hemorrhage. He fears that the steam generated by the hot wire would penetrate the peritoneal cavity and have an irritating effect. He has a galvanic cautery battery, but has not used it since the introduction of Paquelin's benzoline cautery, as he finds the latter far more handy and manageable. He thinks Dr. M.'s suggestion of shelling out the uterus a very good one.

Dr. Montgomery exhibited through the courtesy of Dr. W. H. Warder the

Uterine Appendages

which had been removed from a young lady for the relief of dysmenorrhœa which had resulted in physical and mental failure. Menstruation commenced at the age of fourteen years, had always been painful, and had developed hysterical manifestations. Bathing at the sea-shore had at one time stopped the periods for three months. After this her health failed. Her mind had been seriously affected for the last three years, and she would run away or do herself some violence at the menstrual periods if not closely watched. Examination: The uterus enlarged and tender; there was profuse leucorrhœa. The os uteri was dilated, and the uterine cavity scraped and cauterized with carbolic acid and bromides, etc., used internally, but no improvement resulted. The ovaries were removed to-day through abdominal section; cat-gut ligatures were used. The ovaries are very much enlarged, and contain small cysts. The abdominal wound was closed with silk sutures, and covered with an impervious dressing of collodion, cotton, etc.

Hystero-Epilepsy as a Complication of Pregnancy.

Dr. William H. Shipps, of Bordentown, N. J., sent the following contribution:

Briefly defined, hystero-epilepsy is a term applied to an abnormal neurotic condition in which are manifested certain phenomena, characteristic both of hysteria and epilepsy. Out of 276 patients confined at La Salpêtrière Hospital, Paris, under treatment for various nervous affections, 32 were diagnosed by Beau, a careful observer, as suffering from this disease. Among this number, the malady assumed either a distinct or combined form, hence he very wisely groups the cases in two classes. In the first, the hysterical seizures and epileptic fits remain distinct, one from the other; to this form he adapts the term given by Landouzy, and designates it as hystero-epilepsy with distinct crises.

In the second class, and the one of which this article furnishes an illustration, the hysterical and epileptic seizures are co-eval, both developing at the same time; to this form the name of hystero-epilepsy with combined crises has been given. The object of this paper is, not to enter into a consideration of the disease as it is met with in general practice, but simply to examine it as a complication of pregnancy, a standpoint from which, fortunately, we are rarely called to view it.

During the early part of March, 1883, I was called to attend a woman said to be in a fit. Arriving at the house, I found, lying on a bed, a young woman, apparently seventeen or eighteen years of age, of fairly vigorous physique, who was striving against the united efforts of two or three neighbors, who sought to prevent her doing

herself bodily harm in the violence of her struggles. Examination showed entire loss of consciousness, eyes open and staring, pupils widely dilated, frothing at the mouth, which was then tightly closed, pulse full and bounding. Inquiry elicited that during the day she had been visiting a friend, herself the subject of some spasmodic affection, and whilst in her company became greatly exercised on some trivial occurrence, and in this state of excitement returned home, which place she no sooner reached than she was seized with a convulsion. Her husband informed me that she was in the third month of pregnancy, and that prior to this morning she had on one or two occasions attacks somewhat similar though of less severity. I at once injected, hypodermatically, one-third grain of morphine, which in a short time was followed by a total disappearance of all spasmodic action, a state of stupor supervening, from which, in the course of three or four hours, she aroused, apparently as well as ever. On the day following I was called to see her, and found her in a state of high nervous excitement, sobbing and deploring the presence of some impending danger, which she, in her imagination, insisted was threatening her. In a short time, the stage of muscular contraction, loss of consciousness, stupor, etc., took the place of hysterical symptoms, finally terminating as before in a return to her normal condition.

Without attempting to follow the case step by step, taking in all its details and noting the many and peculiar phases through which it passed, it is interesting to note that prior to September 23, '83, covering a period of two hundred days, not a day passed without the occurrence of one or more paroxysms. At times the hysterical phenomena would be most marked and usher in the attack; then again, the epileptic fit would take the precedence; always, however, accompanied by the undeniable imprint of the dual disease, hystero-epilepsy. In the inter-paroxysmal period she enjoyed for the most part average good health.

On the morning of September 23d, I was asked to see her in an attack of more than usual gravity. When I reached the house she was profoundly unconscious, and had been so for several hours. The time for her approaching labor being near, I made a vaginal examination, but found no evidence of commencing uterine action. I ordered a hot mustard bath, mustard to the extremities, and

bromides the moment she should be able to swallow. In the evening when I again called, her condition was apparently unchanged. I then ordered a blister to the nape of the neck, and left the patient, to return early in the morning. At 7 a. m. a messenger called stating that the woman was now perfectly rational, and to all appearances in labor. I at once responded, and found that she was having bearing-down pains of moderate intensity at intervals of five or ten minutes, mouth of womb dilating, vertex presenting. I remained by the woman's side until 3.45 p. m., when the child, a healthy female weighing 9 or 10 pounds, was born. The labor did not differ from ordinary labors, except that it was only by the utmost vigilance that the woman was prevented from falling into one of her accustomed attacks. After the birth of the child, I gave it to the mother, at the same remarking to her, that as she valued the life of the child, under no circumstances to allow herself to have another convulsion. She promised faithful obedience, and up to the present has not shown the first indication of her old trouble. It should be mentioned that during the entire period the patient was under observation she had daily taken large doses of the bromides and other nervines without any effect, save perhaps in ameliorating the number and violence of the paroxysms. The case is interesting on account of the rarity of the disease as a complication of pregnancy; its persistence throughout the entire period; its resistance to all remedial measures, and the final disappearance of all symptoms after the termination of labor.

Two queries very naturally present themselves: What was the exciting cause of the attacks? Would the induction of premature labor in this and similar cases be justifiable?

In answer to the first query, I attribute the attacks to an action upon the brain and spinal cord, reflex in its nature, and developed or excited by the fœtus in utero.

The happy termination of the case would seemingly offer a negative to the second query; but better judgment will, I think, suggest the wisdom of the operation and the danger of refusing to employ what, theoretically at least, offers the only chance of relief; at all events, in a similar case I would most certainly have recourse to the operation, and expect from it the best results.

EDITORIAL DEPARTMENT.

PERISCOPE.

A New Anæsthetic Mixture.

Dr. William A. Byrd, of Quincy, Ill., has been using a mixture, composed, by measure, of bromide of ethyl, one part; chloroform, three parts; alcohol, four parts. These substances, mixed, form a clear solution, of a pleasant odor, and of a warm, sweetish taste. Dr. Charles Wesley Rook

thus writes of its physiological action in the *Jour. Am. Med. Association*, December 15, 1883: I have administered this anæsthetic to a number of patients, varying in age from early childhood to adult life; to those enfeebled by disease or suffering, and to those apparently healthy; for operations comparatively trivial, and for others which were protracted and serious; inducing and sustaining complete anæsthesia, in some cases only for a few moments, while in others for more than

an hour; and in all these cases, with their varying circumstances and conditions, I have observed a remarkable similarity in the physiological actions of this anæsthetic. The stage of excitement or intoxication is brief, sometimes absent; if occurring, is never violent. The stage of spasmodic rigidity of the voluntary muscles seldom occurs; when occurring, it is not extreme. Following these stages, when they are present, or within a few minutes from the commencement of the inhalation, the stage of complete anæsthesia is induced, when any unfavorable or alarming conditions or symptoms occurring in the preceding stages, as excitement or rigidity, will be relieved, so that the vital functions are carried on as regularly, and apparently as effectually, as if the patient was in a natural physiological sleep.

The time required to produce complete anæsthesia is from one to three minutes in children, and from three to five, and possibly eight minutes in adults. When inhaled, and especially if inhaled through the nostrils, patients will sometimes complain of a choking or suffocating feeling, probably due to some spasmodic condition of the glottis or larynx, which is quickly relieved by requesting the patient to inhale through the mouth, three or four deep inspirations. Sometimes, though very seldom, coughing will be caused, perhaps due to the action of the anæsthetic vapor upon the over-sensitive bronchial mucous membrane, but it is quickly checked by pushing the anæsthetic a little more rapidly. Nausea and vomiting may occur, more apt to when administered soon after eating, and, like coughing, may be checked by crowding the anæsthetic a little faster.

Effect upon the Eyes.—Soon after the inhalation is begun, and especially if the stage of excitement is present, the pupils are dilated, but when complete anæsthesia is induced, they are more or less contracted; the conjunctiva is usually insensible to irritation, but I have seen a case in which the degree of anæsthesia was sufficient to admit of the thorough and extensive application of the actual cautery, and yet the conjunctivæ remained sensitive, and the pupils responded quickly to light.

Effect upon the Circulation.—At the commencement of the inhalation, the pulse, either from excitement or in anticipation of the coming operation, would naturally be somewhat quickened; but when complete anæsthesia is induced, the pulse becomes slower, fuller, and stronger.

Effect upon the Respiration.—This is at first stimulated, but when insensibility is induced it becomes slower and more regular, very much resembling the respiration of natural sleep.

Effect upon the Temperature.—It is generally lowered more or less, as the skin is usually moist, and occasionally free perspiration occurs.

During the stage of complete anæsthesia, the eyelids are closed, the face retains its natural color, so that the countenance looks peaceful and placid.

The duration of the stage of anæsthesia is variable; in some, complete consciousness returns within a few minutes after the administration is discontinued, while in others the stage of anæsthesia seems to be followed, without any intermission, by a period of natural sleep, which may

continue from ten to thirty minutes, or even longer, from which, on awakening, the patients seldom have any symptoms referable to the anæsthetic.

In the preparation of this anæsthetic, it is believed that no new chemical compound is produced; that the ingredients, not entering into a chemical union, simply form a mixture. The alcohol was added as a diluent or vehicle for the better administration of the chloroform and ethyl bromide. Although alcohol, alone, is employed by some, more especially by Dr. John D. Link, of Terre Haute, Indiana, but little of the virtues of this anæsthetic, except, perhaps, the sleep following the stage of complete anæsthesia, are attributed to the alcohol.

ADMINISTRATION.

Because of the quantity of chloroform entering into its composition, a considerable amount of atmospheric air should be inhaled along with the anæsthetic. It has been administered most frequently through an inhaler—Dr. Jos. C. Hutchinson's, of Brooklyn, N. Y. But the same results have been obtained when simply a towel was used as an inhaler. At the present date, November 30, 1883, anæsthesia has been produced in ninety-eight cases, without causing any bad effects, save vomiting in three cases. The quantity necessary to induce and sustain anæsthesia, depends, of course, upon the duration of the operation. A half drachm poured into the inhaler, or upon a towel, will generally be sufficient to induce anæsthesia, which may be sustained by the addition, from time to time, of half the former quantity.

The Etiology of Fungous Endometritis.

The *Med. Times and Gaz.*, December 8, 1883, says:

A recent number of the *Archiv für Gynäkologie* contains a long, but somewhat theoretical, paper by Dr. Brennecke on the etiology of fungous endometritis, more especially of the form described by Olshausen under the name of "chronic hyperplastic endometritis." The weakness of this carefully written paper is in the small number of cases upon which it is based. Of the disease described by Olshausen, the author believes there are two forms—a glandular, in which overgrowth of gland-tissue is the conspicuous change; and an interstitial, marked by hyperplasia of the connective tissue. Between these extreme forms, other mixed or intermediate cases occur, in which both changes are present. The interstitial form occurs in the younger, the glandular form in the older patients. Dr. Brennecke describes six cases observed by himself, and refers to some other published cases, and upon this material he builds his theory. He finds that in them all the hemorrhage and other symptoms characteristic of the disease were preceded by periods either of complete amenorrhœa, or of irregular, infrequent, and scanty menstruation. Therefore, he says, the disease depends primarily upon a functional disturbance in the ovaries, which, as a reflex effect, causes chronic hyperæmia of the uterine mucous membrane, and thus leads to hypertrophy of that structure. This reflex effect is produced through the nervous mechanism which governs ordinary

menstruation, and it therefore affects the body only, not the cervix, of the uterus. Being a disease due to reflex action, it cannot be cured while the cause of the reflex effect remains in operation. Hence, says Dr. Brennecke, the frequency of relapse which is observed in this disease. Our author also adduces the occasional association of abscess of the ovary with this morbid condition in support of his view. For the treatment of this form he looks on the curette, used to remove the hypertrophied membrane, as the grand agent. This should be combined with tonic medication to alter the morbid action which leads to its formation. Cauterization he thinks useless, its adoption being based on an erroneous view as to the pathology of the disease, viz., that it is merely a local change in the uterine mucous membrane. He does not think that this malady ever passes into cancer. The form of disease in which there are localized fungous outgrowths in the uterine cavity, Dr. Brennecke in his experience has always found dependent on some other disease of the uterus: either chronic catarrh (simple or gonorrhœal), retroflexion, stenosis of the os internum or externum, interstitial or submucous fibroids. This form he therefore calls the local uterine form, in contradistinction to the cases of chronic hyperplastic endometritis, which, in accordance with his theory, he calls the ovarian form. He points out these distinctions:

1. In the uterine form there is hemorrhage from the beginning; in the ovarian, menstruation is at first deficient or absent.

2. In the uterine form there is scarcely any tendency to relapse; in the ovarian, a strong tendency.

3. The fragments removed by the curette are smaller in the uterine form than in the ovarian.

4. In the ovarian form these pieces show the structure simply of hypertrophied mucous membrane; this being seldom the case in the uterine form, in which the products of catarrh and ulceration are commonly found.

Lastly, Dr. Brennecke describes fungous endometritis following abortion, which he denominates the decidual form. These cases yield the most satisfactory results to treatment, being commonly completely cured by once using the curette. Dr. Brennecke adds to his paper an interesting novelty in the shape of a plate, in which the course of some cases of fungous endometritis is shown in a graphic form.

The Treatment of Acute Meningitis.

Dr. William T. Plant publishes a lecture on this subject in the *N. Y. Med. Jour.*, December 22, 1883, in the course of which the following occurs:

"If you are clever enough to recognize the disease at its invasion, there is a little hope. The child should be kept quiet in a darkened room, and spared all occasion of annoyance and fretfulness. The diet should be as nutritious as the patient will take. Milk, cream, and meat broths are best. A hot foot-bath fortified with mustard lessens the cerebral congestion and soothes the child. I would use it as many as four or five times in the twenty-four hours. Keep the feet and legs warm by bottles of hot water, or other means.

"Both reason and experience favor cold appli-

cations to the head. If there is a heavy growth of hair, it should be thinned, and cloths, not too thick, wrung from iced water and changed often so as to make constant impression of cold, may be laid upon the head. When there is intense heat of head, bladders of pounded ice may be applied. This is a powerfully depressing measure, and should not, I think, be used in infants or weakly children. When employed, some layers of cloth should come between the ice and the scalp.

"Correct constipation by an agreeable laxative, but be chary of much physic, for the chance of success is not made better, but rather the worse, by hypercatharsis.

"About the only drug that seems to have anything in its favor as making for recovery is iodide of potassium. Roeser suggested it in 1840. It has been extensively used since then with occasional benefit, or apparently so. Quite a number of cases of recovery under it, but discouragingly few as compared with the whole number of cases, have been reported from entirely trustworthy sources. It should be early and continuously given in doses of from two to five grains. To relieve the headache and ward off convulsions, bromide of potassium is our best remedy. When there are extreme restlessness and discomfort, you will find it of service to combine chloral and bromide. Ordinary doses will often fail of appreciable effect. Give them boldly until your purpose in giving them is effected. Valerian, in fluid extract or other form, tends to quiet the muscular twitching and the general restlessness. In most cases it is better to dispense with opiates, since they increase cerebral fullness, constipation, and the growing tendency to stupor. But in certain cases the agony is so great that they may, and should, be freely used, even hypodermically.

By the early and persistent employment of such means as these you may possibly save your patient, and then, in your surprise, you will ask yourself whether, after all, your diagnosis was not erroneous.

The prophylactic treatment of tubercular meningitis promises more than the direct. To prevent so terrific a malady is better than to cure it, even if we could cure it. A child with inherited tuberculous or scrofulous tendencies should be well looked after, especially if it begins to exhibit those vague but growing evidences of poorliness that are so often precursory to this affection. Cod-liver oil should be given, a half-teaspoonful or more ter die. The diet should be nutritious—the best that can be digested. Stimulants are in order—Bourbon or brandy with milk. Mild exercises out of doors, that interest and amuse without fatiguing, should be provided. Change of air and scene is often of signal service. If there are moist eruptions about the head and face, I would not attempt to dry them by local applications, but rather trust them to disappear with the improvement in the general condition.

Wax-like Disease of the Heart.

We note the following from the *Med. Times and Gaz.*, Dec. 8, 1883:

The heart has hitherto had the credit of escaping, as a rule, in cases of lardaceous disease; such, at least, is the opinion that will be gener-

ally found in our text-books, either expressed or implied. That distinction, however, it has no just title to, for Prof. Hamilton states (*Journal of Anatomy and Physiology*, October,) that, on examining cases of general waxy disease, he has found the heart to be affected in nearly every severe case, and sometimes when the affection is limited to a few organs. The change is one that would be very likely to escape detection by the naked eye, a slight milkiness of the endocardium in patches being the only appearance. The auricles are more prone to be affected than the ventricles, and the right more than the left. The wall of the ventricles is of a pale brown color; it is often atrophied, and but seldom hypertrophied. All these changes are, however, very slight; but the addition of iodine brings out rounded or irregular brown stains in the endocardium, and similar brown points may sometimes be seen in the substance of the heart-wall after the use of iodine. The pericardium is usually unaffected. Thus it appears that the disease in the heart corresponds to that found in the arteries, where, as is well known, the intima and middle coats are its chief seats. On examination under the microscope, after staining with methylaniline, the waxy material is found in the endocardium in irregular masses; it appears to have infiltrated the fibrous tissue of the endocardium, and to have pushed the fibres aside. These eventually become surrounded by the waxy material, but they do not become converted into it. The sub-endothelial fibrous tissue also contains many waxy deposits. In the myocardium also the waxy deposit occurs in small patches, either within a fasciculus of muscular fibres, or around the small arteries running in the perimysium externum. The waxy material is poured out from the capillaries into the spaces around these, between the perimysium internum and the muscular fibrils. As the quantity of waxy material increases, the fibrils become compressed, break down into a granular mass, and eventually are absorbed; in this way the fibres gradually undergo atrophy, the waxy matter growing more abundant all the time. It is to be especially noted that the fibres do not undergo any waxy degeneration themselves. The small arteries between the fasciculi are almost all waxy; the small veins, too, frequently become waxy; and many of the capillaries are similarly affected. Doubtless, now that attention has been called to the subject, the disease will be readily recognized by other observers; but if it be so frequently present as Prof. Hamilton believes it to be, it is a little remarkable that symptoms of cardiac failure should not form a more prominent feature at the close of life. It may be that more close investigation will demonstrate that such really is the case. At any rate, Prof. Hamilton has done good service in calling attention to a somewhat overlooked subject.

Tears of Blood.

In the *Brit. Med. Jour.*, December 8, 1883, we read:

This rare phenomenon, the reality of which has often been doubted, seems, however, to occur under certain circumstances. Damalix has published an interesting paper on this subject in the *Arch-*

ives d'Ophthalmologie. He was led to study it by the observation of a case in M. Panas's wards. The patient, a young hysterical girl, said that she had often noticed a flow of blood from her eyes, and spots of blood on her handkerchief after wiping them. For some time the hemorrhage occurred every night. A careful examination of the eyes showed nothing abnormal, but there were photophobia, facial neuralgia, and considerable blepharospasm. This case, as M. Damalix himself says, cannot be considered as conclusive, in spite of the probable veracity of the girl and her parents, as the hemorrhage was never seen by him. But there are on record some observations which do not leave room for doubt. In a case of Hauser, and in another of M. Brun, the observer could actually see the blood flowing from the eyes like tears; there was no possibility of trickery, and microscopical examination of the fluid showed that it was really blood. As for the diagnosis, the name blood-tears must not be applied to the various forms of hemorrhage caused by some organic lesion of the mucous membrane, such as small polypi, etc. The true form has nothing to do with any visible lesion, and the course of the accidents is remarkably irregular. Sometimes there are no premonitory signs, the blood appearing without effort or pain; in other cases, the patient feels for some time pain in the forehead, or at the root of the nose, or, it may be, a feeling of tickling and heat in the lids, which disappears when the blood begins to flow. The amount of blood lost varies from a few drops to a wineglassful; the flow never lasts more than a few minutes, is always intermittent, and generally coincides with other hemorrhages in the skin or mucous membranes, or, on the contrary, with *suppression mensium*. A study of the etiology of the disease shows that it is most frequent in hysterical women suffering from anæmia or hemophilia.

Globulinuria in Acute Bright's Disease.

The *Lancet*, December 8, 1883, says:

A case of acute nephritis is reported by Herr Werner, of Heidelberg, as occurring in Professor Dusch's clinic, which is probably unique. It was that of a child, aged five years and a half, who developed symptoms of the disease after exposure to wet, five days before his admission into hospital. There was only a little oedema of the eyelids, together with signs of diffuse bronchial catarrh on admission; but general dropsy rapidly supervened, and death occurred from suppression of urine five days afterwards. What renders the case remarkable was that the urine only contained globulin, and never serum-albumen, although repeatedly examined, amongst others by Kühne. The characters of the urine were its high color, cloudiness, and moderate deposit, but no blood. Slight turbidity appeared on boiling with nitric acid, and also with acetic acid, clearing up on excess; and after supersaturation with magnesium sulphate no precipitate was obtained in the filtrate on the addition of nitric acid. Fatty epithelial and granular casts were found. The writer points out that hitherto globulin has never been met with in urine unless in company with serum-albumen; and quotes the statement of Senator to the effect that the quantity of globulin is most in the amyloid

form of renal disease, next most abundant in acute nephritis, and least in the chronic diffuse form, although much albuminuria may be present. The same author also suggested that the globulin may be derived not only from the blood, but also from the morbid changes undergone by the renal epithelium, and Herr Werner thinks his case proves the possibility of its being solely derived from the latter source. He interprets his case, then, as one in which the renal epithelium was principally affected, which speedily and widely fell into a necrotic condition, as evidenced by the tube casts, and that this necrotic cell protoplasm was the source of the globulin. The idea is, to say the least, ingenious; and it is most unfortunate that no post-mortem examination was obtainable. It should be added that the child had previously been in good health, and had never had scarlet fever.

The Variations of Pulse-wave Velocity.

Dr. A. T. Keyt, of Cincinnati, contributes a very valuable and elaborate paper on this subject to the *Jour. Am. Med. Ass.*, December 1 and 15, which thus concludes:

From this study we deduce the following resumé of the more prominent facts:

1. The velocity of the pulse-wave is determined above all by inherent states of arterial elasticity; being slower as the arteries are more elastic.

2. It is incessantly changing, within small limits, in consequence of variation of arterial tone; being faster as the tone is higher.

3. It diminishes with the size of the artery traversed.

4. It tends to increase with increase of arterial pressure, but modification from variation of pressure often fails to be manifest.

5. It is not perceptibly modified below the site of an arterial obstruction, but the distal wave is delayed there in consequence of check at the site of obstruction.

6. It is not perceptibly modified in an artery below the site of an aneurism, although the distal wave may be delayed there in consequence of absorption by the yielding aneurismal walls.

Pipitzahzoic Acid.

At a meeting of the German Apotheker-Verein this year, at Wiesbaden, Apotheker Vigener, of Biebrich, read a paper on a new drug from Mexico, called by the natives there "Pipitzahuatle," and an acid obtained from it—pipitzahzoic acid.

The author states that the roots of the plant in question, which belongs to a genus of the natural order of Composite not known in Europe, are used by the natives as an excellent and safe purgative. The plant and the acid obtained from it were briefly described in the *Annalen der Chemie* in 1855, but since then nothing more has been written on the subject.

M. Vigener prepares the acid from the root of the plant by adding boiling distilled water to a strong tincture of it until precipitation takes place. The whole is then allowed to cool, and the crystals of the acid are dissolved in cold alcohol, and purified by sublimation from a water-bath, the temperature at which sublimation takes place being 90° C. According to M. Vigener, pipitzahzoic

acid is an anthrachinone. Alkalies and the alkaline carbonates produce in its solution a coloration resembling that of solutions of potassium permanganate. Pipitzahzoic acid has also received the name of "aurum vegetabile."

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—A fresh and suggestive pamphlet of sixty odd pages on the lenses of the eye, and the methods of studying them, has been written by Dr. Severin Robinské, of Berlin. He criticises the means hitherto employed, gives directions for the study of fresh preparations, describes some new methods of his own, and has some valuable observations on the so-called lense-fibres. (*Zur Kenntniss der Augenlinse und deren Untersuchungs-methoden.* Berlin, Verlag von Eugen Grosser.)

—Among new investigations into the mysterious realm of psychical manifestations, the mental relationship of diseases is always a question of the first order. This is appreciated by Dr. C. H. Hughes, of St. Louis, who has recently contributed a valuable study in this connection on the frequent association of glycosuria and melancholia. We quote his conclusion in his own words: "There is an intimate relationship between nervous depression and glycosuria. The influence of agencies that conserve, recuperate and tranquilize the nervous energies tend to prove this, such as the bromides, chloral, opium and galvanism, the latter especially, when applied to the occipital regions."

—Cupples, Aphon & Co. are working hard on a new edition of Dr. Francis H. Brown's "Medical Register for New England." The work will contain much new information, and will be issued at a lower rate than in previous years, and no doubt every doctor of New England will avail himself of a manual so essential in his profession.

—A neat report, making a pamphlet of forty-eight pages, of the last meeting of the American Dermatological Association, has been prepared by the Secretary, Dr. Arthur Van Harlingen. It contains excellent abstracts of the numerous well-prepared papers read before the Association. It may be obtained from the Secretary, at Philadelphia.

—It would be a pity to see the *Index Medicus* discontinued. But it looks as if there is scarcely interest enough in it to pay actual costs of publi-

cation. The publisher, M. F. Leypoldt, 32 Park Row, New York, makes an appeal to the profession to come to his assistance in the matter, and we hope he will have a favorable hearing. It is a highly creditable piece of work, and ought to be supported.

—Dr. Matthew D. Mann, of Buffalo, N. Y., has sent us pamphlets describing a series of twelve ovariectomies and surgical operations on the pelvic organs of pregnant women. They are able contributions to gynecologic science.

—The cold douche in fever is highly vaunted by some and equally deprecated by others. Dr. G. C. Smythe sensibly discusses the subject in a reprint from the *Cincinnati Lancet and Clinic*, October 6, 1883, entitled, "The Antipyretic Treatment of Typhoid Fever."

BOOK NOTICES.

Wiesen, as a Health Resort in Early Phthisis, with Directions for Clothing, Diet, and Exercise in the Swiss Alps during Winter. By A. T. Tucker Wise, M. D., etc. London: Bailliere & Co., 1883.

The advantage in phthisical cases of a high, dry, generally clear climate, although it may be a cold one, is now generally conceded. Several locations in the upper Alps have long enjoyed celebrity as winter resorts. Among them, Davos-am-Platz stands pre-eminent, but doubtless there are many other stations just as good, though less known. One of them is Wiesen, a hamlet 24 miles from Chur, 5,000 feet above the level of the sea, which Dr. Wise introduces to us in the above volume. We should judge it to be a favorably-situated cure, possessing some advantages over Davos.

The general hygienic and sanitary advice in the volume is instructive and sound. The author brings into relief the stimulating, tonic properties of cold with emphasis. He makes a statement which we have not found any other Englishman willing to acknowledge, to wit: That the Anglo-Saxon race in the Northern United States of America "is physically superior and more vigorous than that of the parent stock." A map, and ample meteorological tables, accompany the text.

Sepulture, Its History, Methods, and Sanitary Requisites. By Stephen Wickes, A. M., M. D., Philadelphia. P. Blakiston, Son & Co. Cloth, 8vo., pp. 156.

The disposition of the dead has become one of the leading questions in the sanitary economies of

modern life. In the closely settled countries of Europe it has become even serious, and it is not long to look ahead before the same will be the case in the older States of our Union.

The various methods which have been adopted to this end by various peoples and in various ages are passed in review in the volume before us. The customs of the Greeks, Romans, Persians, early Christians, etc., are described, and their appropriateness discussed. The author then passes to a hygienic discussion of the evils arising from sepulture where it is carried on with indifference to sanitation. The virulence of several diseases is traced to animal putrescence, and the rules laid down which should govern the management of cemeteries. The author does not discuss cremation, as he thinks there is no call for that method of disposing of bodies.

A Treatise on Syphilis of New-born Children and Infants at the Breast. By P. Diday. Translated by G. Whitely, M. D., with notes by F. R. Sturgis, M. D. New York, Wm. Wood & Co.

For many years Prof. Diday was the leading authority on syphilis of provincial France. His studies were directed very largely to hereditary forms of the disease, and the present treatise was long a standard on the subject. Somewhat out of date now, the notes and additions of Dr. Sturgis serve to bring its teachings up to the position of syphilology at present. The volume is a member of Wood's Library of Standard Medical Authors.

A Treatise on Bright's Disease of the Kidneys. By Henry B. Millard, M. D. 8vo., cloth, pp. 246. N. Y. Wm. Wood & Co.

It is rare that we find a book so evidently the result of careful, original study, so fresh from the bedside, we may say, as the one before us. Retaining, for reasons which he states, and which are sound, the general term "Bright's disease," the author includes in his study the various forms of nephritis, which, since the days of Dr. Bright, have been recognized as simple, acute and chronic, interstitial, croupous, and suppurative. The diagnosis of these forms, always puzzling to the inexperienced, and sometimes to the experienced, is set forth with clearness. Pathological questions are discussed without that pedantic parade of neologisms in which many, especially German authors, are prone to indulge. The anatomy of the kidney, the tests for albumen (which Dr. Millard prefers to write albumin), its significance, and that of urinary casts, etc., are treated with a free style which betokens familiar acquaintance. A number of illustrations are inserted, all or nearly all original.

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CEREBRAL SYPHILIS.

It is of the utmost importance that physicians should have a clear and definite idea of the nature of this form of syphilis, and should have the matter constantly in mind; for it is an exceedingly insidious and dangerous affection if not early recognized, yet very amenable to proper treatment.

Of its nature, Dr. H. C. Wood tells us, in a lecture in the *Boston Medical and Surgical Journal*, December 20, that it consists essentially in an inflammation of the brain or of its membranes, generally of the latter, or of a tumor thereof.

Its symptoms, as we would presume, are those of any inflammation or tumor of this region, there being no special, characteristic symptoms of the disease.

In this fact lies the difficulty, and at the same time the necessity of recognizing the cause, as the treatment will be so radically different.

A peculiar and misleading fact is that cerebral syphilis usually occurs where the evidences of original infection have been very slight—where the patient has probably had a gonorrhœa, and a concealed chancre, with very slight, scarcely noticeable, secondary manifestations. The disease will not develop, as a rule, for years (ten to forty), after the original infection, when the patient may be suddenly seized with cerebral manifestations and die in a day or two.

Abnormal somnolence should call our attention to syphilis, as it is very often the most prominent symptom of cerebral syphilis, although occasionally the very reverse will obtain, namely, wakefulness.

Basal growths not tuberculous, paralyzing the oculo-motor and other nerves supplying the eye, are rarely anything else but syphilitic. Syphilitic basal growths are very frequent. Remember, then, that centric squint, dilatation of the pupil, ptosis, and paralysis of the ocular muscles, are in an adult almost certain evidences of cerebral syphilis.

Sudden nerve attacks, such as temporary aphasia, deafness, epileptiform attacks, sudden and temporary loss of power in a limb, numbness

and the like, are oftentimes due to syphilis. The important fact to be remembered is that these inexplicable, sudden, varying, temporary nerve attacks, when not dependent on hysteria, are very characteristic of cerebral syphilis. They are dependent on the fact that cerebral syphilis is prone to develop with great rapidity after a period of latency, and to cause sudden and violent congestions in proximity to the tumor.

To condense Dr. Wood's most interesting lecture into a brief summary, we would say that whenever we have offered to us the symptoms of cerebral inflammation or tumor, the thought should enter our minds that syphilis *may* be the cause; and realizing how exceedingly difficult it oftentimes is to elicit the truth from this class of patients, especially if they happen to be the sedate and respectable fathers of families and prominent citizens, we should carefully feel our way to fathom the case. If we have any reasonable assurance that syphilis may have been about at any time, then we must institute appropriate treatment; if not, and our other remedies fail to produce any effect, then would we, ourselves, not hesitate to proceed cautiously with specific medication, the results of which would soon settle the question.

A leader of the profession has said that in his opinion the whole world is becoming gradually syphilized; in other words, that by the influence of inheritance and infection the disease is reaching out in every direction. Whether this distinguished man's view is literally true, we would hesitate to say; but we do know that the influence of syphilis on diseased conditions, that is that the peculiar morbid state (whatever it may be) that is produced in its typical entirety by impure sexual intercourse, and modified in various ways, notably by time and medication, is exceedingly universal, and that its effects are noted in men and women to whom the imputation of impure, *illicit* intercourse, would seem to be, and in many cases would really be, most preposterous.

Knowing this, and knowing from so high an authority as Dr. Wood that syphilis is so potent a

cause of cerebral disorder, we would say, be on the lookout for it and be ready to combat it.

OUR FUTURE WATER SUPPLY.

The recommendation of chief engineer of the water department Ludlow, in reference to our water supply, is an eminently practicable one, and well worthy of being carried to a successful consummation.

Those of us who have visited Rome, have oftentimes stood and gazed at the stone giants striding the lonely Campagna, bearing mute evidence to the civilization and sanitary refinement of the Rome of two centuries and a half ago, as do the pyramids and the sphynx to the wonderful engineering skill of ancient Egypt; for, in these ruins, we read that Rome thoroughly realized the advantages of supplying her citizens with pure and wholesome water, and that in order to secure it, she was willing to go to the enormous expense of building vast aqueducts to bring to the city water from the far-off mountains, pure and fresh, and uncontaminated with human refuse.

Such is practically the idea suggested by Colonel Ludlow, and such should be the system in vogue in all large cities.

The water supply of this large city, with a population of 1,000,000, is derived from a river, lined on either bank with goodly sized manufacturing villages, from which human and mill refuse flow into it, these villages coming as near Philadelphia as three miles, while still nearer, a large cemetery, on a high bluff, sends all its rotten drainage into our drinking water. A short time since, our water became so notoriously bad, that an intercepting sewer, at a cost of over \$500,000, was built, in order to carry the waste of these towns down along the river bank, and empty it at a point below that from which our water was derived.

This cost a great deal of money, and yet, to the mind of any one conversant with the sanitary needs of our city or any large city, it seems evident that it is only money wasted; for it is but

trifling with a great public necessity, the demand for pure and wholesome water.

Our public buildings have already cost millions, yet they are not really necessities, for our public affairs can be satisfactorily carried on in a much less pretentious edifice; but pure water is a necessity, we all recognize it as such, and yet we tamely submit to this disgraceful state of affairs, and go on daily drinking liquid sewage, while enough money is annually wasted, to erect in a few years an aqueduct that would ensure us for all time a plentiful supply of water, from a source that would be absolutely beyond the possibility of contamination.

There is no use in wasting words about such self-evident matters.

We should learn from the experience of others, and act promptly.

We venture to say that had Rome derived its water supply from the Tiber, it never would have conquered the world; for instead of being a nation of warriors, of heroes, and of *men*, it would have been a country of sickly and effeminate dudes, poisoned and debased physically, morally and mentally, by drinking its own and its neighbors' waste.

This is a proposition founded on fact, and no one conversant with sanitation will even attempt to refute it.

The greatest problem for all large cities is the water supply; and in order to have it good, it must be derived from a distance, from a point where human refuse *cannot possibly pollute it*.

AN INSULT TO THE PROFESSION.

A deliberate attempt on the part of any commercial company to belittle and disparage the medical profession should be met with determined resistance by the profession; and such a company should be made to feel that nothing can be gained pecuniarily by action of that kind.

This has been done by an important Atlantic Carrying Company, and has been continued after repeated and urgent, though always respectful, protests have been made it by numbers of physicians. The company we refer to is the Red Star

Line Atlantic Steamship Company, sailing between Antwerp in Europe and Philadelphia and New York in the United States—Peter Wright & Sons, agents in the last-mentioned cities. Through sailing under the Belgian flag, its ships are mainly owned by American capitalists, and most of its officers are Americans.

Its action which we protest against is briefly as follows: All passenger steamers are obliged by law to carry medical officers—ship surgeons. In every line except the above, the surgeons are assigned quarters and mess with the first-class passengers. Both as members of a learned profession, as officers, and by custom, they are justly entitled to this. Within the last year the Red Star Line has ordered its surgeons to mess at the second-class table, and ranks them in other respects as second-class passengers. This is an indignity which has been keenly felt as such by all its medical officers; some have resigned in consequence, others have waited, trusting that the remonstrances of members of the profession to the company would have some effect. So far from this, the Red Star Line has added another insult to the profession, by passing over its protests with contemptuous silence.

The appeal is now made to the medical editors of the United States, to our Medical Societies, and to physicians individually, to unite in forcing this company to respect the profession of their medical officers, and to place them on an equality with the first-class passengers. Until this is done, we trust that every physician will not only refrain himself from selecting this line, but will recommend others in its place. The niggardliness which must be its motive in thus insulting the profession cannot fail to show itself elsewhere, to the detriment of the line. There are plenty of other lines, just as cheap, just as safe, in many respects more pleasant and better appointed than the Red Star Line, and they do not put their medical officers in a position wounding to their self-respect and derogatory to the proper rights of the profession. We ask the attention of all to this matter, as one which touches the interest of all.

ERGOTISM.

Since poisoning by ergot may occur at any time in the practice of the country physician, it is well that we should know how to recognize it. The epidemics that have occurred off and on in Germany since 1879 have afforded ample opportunity to Menche, of Bonn, to study the disease, and we note the following symptoms from his report in the *Deutsch. Arch. f. Klin. Med.*: He noted 500 cases. Like with all other morbid agencies, the weakly were more quickly affected than the strong. The first symptom was itching of the hands and feet, sometimes general, and it was the last to disappear. Soon comes on the spasmodic stage, characterized by a claw-like position of the fingers, with the thumb strongly flexed. At times, nearly every muscle in the body was affected, producing rectal and vesical tenesmus, dyspnoea, precordial pain and diaphragmatic cramps. These attacks varied in duration and in frequency of recurrence. The disease was usually preceded by a prodromal stage of malaise, headache, weakness, vertigo, and usually loss of appetite, though sometimes the patients were very hungry.

In the severe cases, epileptic attacks sometimes occurred; and in the milder cases relapses were frequent, while convalescence was always slow.

A singular and noteworthy fact was that abortion was not produced in pregnant women.

When such a combination of rather peculiar symptoms offer themselves to observation, it will be well to look into the grain that may be in use. The treatment will, of course, consist in the removal of the cause.

NOTES AND COMMENTS.

The Influence of Syphilis Upon the Progress of Cancer.

We note the following by Prof. Verneuil from the *St. Louis Med. and Surg. Jour.*, December, 1883:

The reciprocal influences of diatheses are not well known yet, from want of attention being drawn in that direction. That of syphilis upon cancer can, in certain cases, be given with precision, of which the following cases are examples: A woman, whose antecedents are unknown, was taken with a cancerous tumor of the breast, about

a year ago. The progress was at first very slow, but she contracted syphilis eight months since, which is now in the full period of secondary accidents. On investigation how the syphilis had acted on the cancer, the conviction is reached that it has considerably augmented its progress and its generalization. Indeed, the entire left breast and the axillary ganglia have undergone a cancerous degeneration. The subclavian ganglia form a considerable mass, and reach up to the mastoid apophysis. Considering that the first notion of cancer is of one year only, and that it attained its present development in the last few months; that the invasion of the subclavian ganglia is only exceptional, and then it is considered a formal contra-indication of all operative interference; the conclusion is inevitable, that syphilis was the origin of this abnormal process. This case presents another unusual fact. When cancer is largely developed, and the ganglia are affected, pain is always very great; but in this case, the patient does not suffer any pain at all.

Double Colle's Fracture.

It is very rare to hear of such a case as that reported by Dr. R. J. Bryden (*Brit. Med. Jour.*, December 8, 1883), wherein a young man of eighteen, falling from a height of thirty feet, and having his wrists doubled beneath him, received a perfectly symmetrical Colle's fracture of each wrist. The typical photograph accompanying the report, leaves no room for doubt as to the correctness of the diagnosis. Straight anterior and posterior splints, not reaching much beyond the wrists, and drawing the hands to the ulnar side, were applied.

Chromic Acid in Affections of the Mouth.

The *Med. Record*, Oct. 20, 1883, says: Dr. Cauquil, writing to the *Bulletin Général de Thérapeutique*, No. 12, vol. civ., concerning the employment of chromic acid, as recommended by Dr. Butlin in diseases of the tongue, states that he has also found it of value in stomatitis. He has used it with success in mercurial sore mouth, in the strength of one to five. In other cases of syphilitic pharyngitis with hypertrophy of the tonsils he has obtained good results with the same solution.

How to Destroy the Carcasses of Animals Dead of Contagious Diseases.

This question has been occupying the time of the French Academy of Sciences. The new process of M. Girard consists in dissolving the car-

casses in cold concentrated sulphuric acid, and utilizing the resulting liquid for the production of superphosphate of lime. At the end of eighty hours the entire carcass is dissolved in the acid, and only a colored liquid remains. The destruction of germs is thus complete, as has been proved by inoculation with the insoluble residue of the liquid. According to recent experiments made at St. Gobain, 321 kilogrammes of sulphuric acid (at 60° proof) dissolved in ten days nine sheep weighing 204 kilogrammes. From the 525 kilogrammes of liquid remaining, M. Girard extracted 25 kilogrammes of grease, and 500 kilogrammes of acid, which, mixed with 440 kilogrammes of coprolites from Ardennes, produced 940 kilogrammes of superphosphate of lime, containing 30 per cent. of nitrogen. In addition there was a quantity of soluble acid and insoluble phosphoric acid obtained.

The Treatment of Granulated Eyelids.

Jequirity is coming strongly into vogue in the treatment of granular conjunctivitis, and it seems to be a remedy that promises much. Dr. F. C. Hotz recently read a paper before the Chicago Medical Society (*Ass. Jour.*), which thus concludes:

1. Jequirity is the best known remedy for chronic granular conjunctivitis.

2. It is the most efficient remedy for clearing a trachomatous pannus, and in inveterate forms of pannus it is preferable to the operation of peritomy, as well as inoculation of blenorrhoeal virus, because it works quicker than the operation, and is safer than the inoculation.

3. It has no injurious effect upon the eyes, and can be used with perfect safety, even where the cornea is ulcerated.

4. It should not be used while the cornea and conjunctiva are actually inflamed.

5. It does not benefit those cases of chronic conjunctivitis in which the symptoms of catarrh (succulence of the retrotarsal folds with increased secretion, etc.), predominate over those of trachoma.

6, and lastly. The more violent the attack of the jequirity ophthalmia is, the quicker will be the cure of the granulated lids, and the speedier will the clearing of the cornea be produced.

Cauterization of the Lung.

We recently had occasion to note that this operation had been performed in Germany, and it now affords us pleasure to see that the *Med. Rec-*

ord, December 22, 1883, deprecates its performance. It wisely says:

"There certainly seems need of further experimentation upon animals before the human lung shall be considered a legitimate field for the exploits of the surgeon. And these experiments should be genuine efforts to relieve diseased conditions. Because a healthy dog will survive the removal of a part or the whole of one lung, it by no means follows that a like result is to be anticipated in the case of a man whose lungs are infiltrated with tubercles, and whose vital power is already greatly reduced. When it is found that an animal with tuberculosis can be cured, or even greatly benefited, by the canterization or exsection of the diseased pulmonary tissue, it will then be time enough to make cautious attempts in the same direction upon the lungs of the human subject."

Observations on the Normal Temperature of the Human Body.

Before the Liverpool Medical Institution (*Med. Press*, October 31, 1883), Dr. Carter read a paper based on a series of original observations made on the staff of night nurses in the Royal Southern Hospital. Two sets of observations were made at an interval of some years, and the results obtained in both were nearly identical. They showed—

1. That the normal temperature of the human body during the hours of night and early morning is lower than has been generally believed.

2. That the daily range of normal temperature is consequently greater than is usually accepted, amounting sometimes to three degrees Fah.

3. That this great periodic change is not affected by change of habit, but is as great in those who are well seasoned to night work as in those who are unaccustomed to it.

4. That it is but little affected by food.

Tannate of Sodium in Chronic Nephritis.

In *Centralb. f. Klinisch. Med.*, September 1, 1883, Lewin first recommended tannate of sodium in nephritis, and Ribbert's experimental researches demonstrated its action in causing decreased elimination of albumen.

Briese has used it, in four cases in Mosler's clinic, prepared as follows:

R. Solution of tannic acid, 2 parts to 100; add solution of bicarbonate of soda (9 to 5) ad react. alcalin. S.—Dose, one tablespoonful every half hour.

This mixture was not equally well taken by

the patients. In some cases it caused gastric disturbances and vomiting. The daily quantity of albumen eliminated by the urine was not diminished, the nephritis went on, and the patients grew worse daily; and it was apparent that the remedy was, in these cases at least, of no value whatever.

Therapeutic Use of the Magnet.

The *Alienist and Neurologist*, July, 1883, says:

Dr. D. L. Barraquer (*Gaceta Medico Catalana*), reports two cases in which marked relief followed the application of the magnet. The first case was cerebral hemorrhage with consecutive hemiplegia. The hemorrhage had occurred three years previously. One application was followed by visible improvement, and after four sances the forearm and finger could be fully extended. The second case was a boy suffering from deafness, due to middle-ear disease secondary to measles. Galvanism had been employed eight times, with the effect of increasing the hearing distance from 0 to 1 foot. The magnet was tried, and, after a half hour's sitting, the hearing distance was increased to three feet. At the fifth seance the watch could be distinctly heard at a distance of fifteen feet.

The Administration of Quinine.

In the *London Practitioner*, Dr. David Young enunciates the following:

1. Never to give quinine in antipyretic doses in cases where the bowels are confined and the secretion of urine is scanty.

2. In cases where it is being administered and an increase of dose is desirable, this may be safely done if the skin, bowels, and kidneys maintain their normal functional activity.

3. In many cases of remittent and intermittent fevers, the combination of the drug with chloride of ammonium or a salt of potash or soda is likely to be more easily tolerated, as well as more useful, than if it be administered in a pure form.

4. During the administration of quinine should a headache come on or increase in intensity, the case requires the most careful attention.

Phosphate of Codeia.

The *Boston M. and S. Jour.*, September 20, 1883, says: An English contemporary remarks that Herr E. Merck, of Darmstadt, at the instance of Professor Hegar, of Freiburg, has succeeded in producing a phosphate of codeia, which has the great merit of being soluble in four parts of water, so that it can be used subcutaneously. It crystal-

lizes in small four-sided columns, is white, rather bitter to the taste, and resembles the sulphates and hydrochlorates of the same base. In its action it resembles morphia, except that it is milder, and the symptoms of intoxication are less pronounced. The dose required is about double that of the salts of morphia. No marked local disturbances followed the subcutaneous employment of the drug.

Iodoform in Ophthalmic Therapeutics.

The *N. Y. Med. Jour.*, November 10, 1883, says that Vossius (*"Archiv. für Ophthalmologie, xxix., 1"*) recommends iodoform in all ulcerative processes of the cornea, especially in *ulcus serpens*. The earlier the case applies for treatment, the more rapid and favorable is the effect. Its use is not contra-indicated by any complication of the iris. He also advises its use as an antiseptic in all superficial and deep, accidental and artificial wounds of the conjunctiva and cornea, as well as in wounds of the sclera. He has but rarely noticed any evil effects from its use, and never any abscess of the conjunctiva; nor has he ever met with the amblyopia spoken of by Hirschberg, and attributed by the latter to the use of this drug.

Salicylic Acid as an Application to Epitheliomatous Growths.

The *Brit. Med. Jour.*, November 10, says that in an interesting case of rapidly growing epitheliomatous vegetations springing from the floor of a rodent ulcer, Mr. Thomas Smith advised Mr. Howard Marsh to use a saturated solution of salicylic acid as a local application. Mr. Smith said that, some time ago, he had been induced to make use of this remedy in the treatment of simple papillomata, and the result had been so favorable that he was led to apply it to epitheliomatous cases also. In the first case, which had now been under observation for some time, the application was entirely successful, the epitheliomatous growth having been entirely destroyed in two or three weeks.

Nervous Dyspepsia.

In persons of a nervous temperament, especially excitable women, we will frequently meet with a form of dyspepsia, not amenable to ordinary treatment. We recently had a case, in a woman, caused evidently by mental worry, in which there was great depression of spirits, a globus hystericus and a great oppression, with constant and violent eructations of wind, always greatly ag-

gravated by eating. Antacids, pepsin, and a host of routine remedies, were useless; she was then ordered tincture of valerian and bromide of potash in small doses (ten drops of the former and two grains of the latter) every hour. The dyspepsia and nervous irritability commenced to yield after the second dose, and soon disappeared.

Early Incision in Cervical Abscess.

It is becoming a gradually recognized rule that it is better to evacuate abscesses as early as possible rather than to wait, as heretofore, until they are nearly ready to burst. The argument is that nothing is to be gained by delay, while serious results may ensue from the burrowing of pus and other causes. More especially is this early operative interference recommended for cervical abscesses, on account of the vital nature of the elements of this region. To the other cases reported, Dr. F. R. Campbell adds an instructive one in the *Buffalo Med. and Surg. Jour.*, Dec., 1883, where, although no fluctuation could be detected, yet the bistoury was used, and when subsequently poulticing encouraged a free flow of pus, a probe demonstrated that the pus had so burrowed that a fatal internal rupture would have been much more likely than a natural external opening.

The Micrococci of Acute Osteo-mylitis.

Dr. Koch has found micrococci in the pus obtained from osteo-mylitic abscesses, and he publishes his experiments with them in a recent issue of the *Deutsch. Med. Woch.* After cultivating them on boiled potato, he inoculated various animals, but failed to produce osteo-mylitis. When, however, a bone was crushed or fractured a few days before the inoculation, the disease was developed by them, which points to the rather instructive fact that, in order to produce osteo-mylitis of this acute infective type, not only must there be a specific virus in the system, but there must also be a local inflammatory process, or, if it be preferred, a local injury to the tissue, which becomes the seat of infective inflammation in the presence of the prime factor—the virus in the blood.

Dystocia Due to a Vaginal Cicatrix.

Cicatricial bands stretching across the vagina and so interfering with the progress of labor, are sufficiently rare to make the case reported by Dr. M. Wallace in the *Canadian Practitioner*, December 1883, interesting. From the anterior to the posterior walls of the vagina stretched strong bands,

the results probably of vaginal lacerations in previous difficult labors, and when the head descended it was arrested by them. The finger-nail was used to scratch through the band that was most stretched. Forceps were applied, and after an hour's hard pulling, one of the bands gave way with a perceptible noise, and the child was delivered. On the eleventh day she died with symptoms of internal hemorrhage, but a post-mortem was not obtainable.

Santonin for Gleet.

Dr. Wm. Anderson thus writes to the *Lancet*, November 10:

"In treating a patient some months ago for lumbrici, he said to me, 'You have not only killed the worms, but you have cured my gleet.' I may mention that the gleet had been obstinate, of long standing, and recurrent in spite of the usual remedies. He has had no return since. In 1864 I published a paper on santonine, but although I then made some experiments showing its effects upon the urine, it never occurred to me to try it in gleet or gonorrhœa. The formula I recommend is: Santonin, sacchari lactis, ãã gr. v.; terebene et ft. pulv. To be taken twice a day, fasting, in milk."

Bromide of Arsenic in Diabetes.

From the *Jour. de Med. de Paris*, October 13, 1883, we learn that Dr. Pekai, of Buda-Pesth, has been much gratified with the success of this treatment. He began by putting three drops of the medicine in one ounce of water, and this was taken in three doses; this was increased by one drop every three days, until ten drops were taken daily. The solution is prepared as follows: Grs. iss ãã of arsenious acid and carbonate of potash are placed in a brine measurer (éprouvette); gtt. v of water are added, and treated until the liquid is limpid. Then add sufficient water to make ten grammes (3i iss by weight). Add, then, grs. iss of bromine, and leave for twenty-four hours.

Syphilitic Cephalalgia.

We recently had a case of acute pain radiating over the vault of the cranium in a woman whom we knew had been infected about 18 months previously. From the woman's exalted moral standard, no one would have suspected a syphilitic taint. It was innocently contracted in a charitable ministration. This we know. Dry cups, blisters, and all the usual anti-neuralgic treatment, had no more effect than so much water.

Finally, large doses of the iodide of potassium (10 grs. every four hours) and biniodide of mercury ($\frac{1}{16}$ gr.) were given, and like magic, the intense pain, that had lasted for two weeks, disappeared. An extensive iodide eruption appeared all over the body.

Chloroform Locally to Relieve Pain.

When applied to the skin as vapor, chloroform is much less irritating than when used as a liquid. Dr. Huesner (*Deutsch. Med. Woch.*, October 30, 1883,) uses shallow tin cups, so curved that they may be closely applied to the desired part. In the cup he puts a piece of lint, saturated with a few drops of chloroform. To make the cup fit tight, a rubber band is put around its edge, and it is fastened on with a rubber band. A simple wineglass will answer. He has had good results in pleurodynia, dry pleurisy, headache, and earache. It is not of much use in deep-seated pain.

Purpura from Quinine.

The indiscriminate use of quinine can do more than produce the ordinary cerebral symptoms of cinchonism, for Dr. E. Wigglesworth tells us (*Boston M. and S. Jour.*, December 20, 1883,) of a woman who noticed a scarlet, non-elevated, irregularly circular patch, about as large as a silver half dollar, on her forearm, one hour after taking one grain of quinine; she took eleven more grains, and the spots increased in number. Upon discontinuing the quinine, the spots desquamated and disappeared.

Tardy Action of Pilocarpin.

Dr. F. W. Ellis, of New Richmond, Wis., writes to the *Med. Record*, October 6, 1883, that on January 10 he gave a boy, aged three years, suffering from ascites, a course of pilocarpin, covering two days. From the 11th to the 16th there was no effect. On the night of the 16th a fly-blister was applied. On the 17th all the characteristic symptoms of jaborandi appeared; profuse sweating and salivation, so that the circumference of the abdomen diminished two inches.

Injections of Ether for Sebaceous Cysts.

Make the tumor tense by pressure and inject by a Pravaz syringe 5-10 drops of ether into the largest aperture noticed. Repeat every second day, until inflammation is set up. Then puncture the base of the tumor, when pus will escape, followed by broken-down sebaceous matter, and the

tumor is cured. This is the treatment recommended by M. Vidal in *Bull. Gen. de Therap.*, November 30, 1883.

A New Use for Apomorphia.

This valuable emetic has proved serviceable in two cases of hystero-epilepsy reported by Dr. T. Hammond Williams in the *Med. Times and Gaz.*, December 8, 1883. In the one case the attacks were probably due to suppression of menses, in the other their etiology was obscure. In both, however, they diminished in intensity and ultimately disappeared under the hypodermic use of apomorphia in doses of one-fifteenth of a grain.

Cerebral Syphilis.

Apropos of our editorial on this subject (see page 21) the case reported in the *Boston M. and S. Jour.* December 20, 1883, by Dr. Egbert H. Grandin, is worthy of note. The patient was a lady aged 35, who had been syphilized by her husband fourteen years previously. Last summer she was suddenly seized with a paralytic stroke, and though she improved for a time under large doses of iodide of potassium and mercurial ointment (for syphilides), she had a convulsion, and passing into a comatose state, died early in November.

CORRESPONDENCE.

FOREIGN CORRESPONDENCE OF THE REPORTER.

Prof. Von Bergmann in Office and Operating Room.

EDS. MED. AND SURG. REPORTER:—

Prof. Von Bergmann, who succeeded Prof. Langenbeck in the surgical department of the University of Berlin about a year ago, has more than maintained the prominent position which the chair occupied under his predecessor. Arriving in the city shortly before the beginning of the winter semester, and consequently of public operations in the operating amphitheatre, through the courtesy of an acquaintance I waited on Prof. von Bergmann to request permission to attend a private operation in the hospital.

A physician's office here on the ground floor would be a novelty. A room, or suite of rooms, as every traveler well knows, is commonly rented up one or two long flights of stairs in some one of the vast buildings, which are cut up into flats, offices, and stores, and of which the city is largely composed. The comfortable, individual dwellings so common with us for the middle and upper classes, and which have come to be synonymous with "home" in our eyes and hearts, are depressingly absent. The great surgeon is no exception to the rule. I found his quarters in a

large flat facing the shipping and narrow quays of the Spree. A ring at the portier's bell and the door mysteriously springs ajar, but no one appears. Instinctively you climb the long stairs, broken by landings. Another door, and the physician's name on a small tablet beside it. Another bell, and a maid-servant appears, and you follow through a narrow, dark corridor, and are ushered into a large room, dimly lighted. It is the single hour allotted for office consultations late in the day, and a number of persons are waiting. By the aid of the gaslight, you discover the room is furnished much like a parlor, and that magazines and periodicals are lying on the centre-table. Some love-birds are engaged in their endless amours, and a tank of goldfish are quenching their eternal thirst.

Presently the professor appears. He is without assistant, and disposes of his cases rapidly as they enter his private room. He is a middle-aged man, with a large nose and long hair, large, dark, alert, brusque, uneasy mannered, and restless. In a hurried monotone, he makes an appointment for the following morning, and is speedily busied with the next comer.

* * * * *

Prof. von Bergmann belongs to the school of believers in thorough antiseptis. The operation about to be performed was for resection of the right hip-joint in a man about forty-five years of age. The operating room was a small, well-lighted one, with painted walls, in one of the buildings of the Royal Clinic. His assistants were Drs. Zeller and Glück. After the administration of chloroform, an incision was made over the trochanter major, longitudinally with the *gluteus maximus*. A quantity of pus, containing muscular debris, escaped as soon as the cavity around the joint was penetrated. The bone was denuded of periosteum and twice amputated with a chain-saw. The head of the femur had been destroyed, and the extremity of the shaft slightly invaded. The walls of the cavity were carefully scraped and antiseptically cleaned, and the acetabulum partly chipped away with a chisel. A pus cavity on the inner side of the thigh was likewise evacuated by a free incision. No blood-vessel of any size was wounded. Both cavities were thoroughly washed and syringed out with a solution of iodoform (10%) in ether, and afterwards dressed by covering the surface with several grammes of powdered iodoform and filling the incisions with pieces of very thin, open meshed cotton-cloth, which had been cut in strips and saturated with a solution of corrosive sublimate, 1 to 1,000. This cloth, which is prepared by a somewhat complicated process beforehand, was also piled over the cavities, and then the limb and lower part of the body enveloped in repeated layers of it, between which was first spread oiled silk, and afterwards two long strips of felt (2x½ inches) reaching from the waist to the foot. After a week or ten days, extension will be kept up with a weight of from eighteen to twenty-five pounds. After several weeks, the dressings will be removed.

NOTES.

The most scrupulous attention is paid to cleanliness in the hands and finger-nails of the operator

and assistants. After a thorough washing, the hands are dipped in a solution of corrosive sublimate, 1 to 1,000. This was repeated several times during the operation, and the person of the patient around the point of incision was also similarly washed and treated.

Before and during the operation a spray of carbolic acid solution, 3 to 100, continuously played on the part operated on, covering surgeons and nurses, as well as patients, with a fine drizzle.

All operating instruments and ligatures are kept in an antiseptic solution during the operation, except when in use; the instruments lying in the carbolized preparation. The sublimate solution is Prof. von Bergmann's favorite antiseptic, when practicable. He first introduced it six years ago at Würzburg.

The operating-table is covered with a heavy sheet of rubber, one-half inch thick, which is easily and thoroughly cleaned and kept free from septic infection. Chloroform only is used. It is administered by means of a piece of flannel cloth stretched over a wire cone, about the size and shape of a very small bowl. Patients are not allowed to eat on the day of the operation, before its performance. Nausea is comparatively rare, and deaths on the operating-table very rarely heard of. The head of the patient rests on a cylindrical air cushion, which offers suggestions of convenience and cleanliness. The surgeon applied the bandages wholly himself. Everything was immaculately clean.

The iodoform, which to an American seems used with such astonishing freedom, not infrequently—according to Berlin physicians—produces delirium, and is even charged with more serious results. Dr. Fehleisen, one of Prof. von Bergmann's assistants, is continuing his experiments with the bacilli of erysipelas and inoculation with the cultivated poison, notice of which was taken editorially in the *REPORTER* several months since.

Berlin.

W. O. S.

Puerperal Eclampsia.

EDS. MED. AND SURG. REPORTER:—

On December 7, I was called to see Mrs. W—, primipara, aged 26, who was reported to be in convulsions. I had examined her urine the day before and found it very albuminous. As I reached her, she was having her fourth convulsion. As soon as she could swallow, I administered heroic doses of tincture of belladonna, with bromide of potash and sulphate of morphia. The fifth convulsion was delayed. She was then given by enema 100 grains of bromide of potash, which effectually controlled all convulsive movements. The consulting physician, Dr. Colburg, of Syracuse, who arrived about two hours after the last convulsion, recommended fluid extract of gelsemium in lieu of the belladonna; this was given, and also thirty-drop doses of fluid extract of jaborandi until free diaphoresis was produced. She was also given a large dose of salts, which purged her freely. She was then put upon digitalis, (five drops) and sweet spirits of nitre (half a drachm) every five hours. She did not regain consciousness until the morning of the 9th. At two a. m. on the 10th, labor began and was completed with-

out an untoward symptom. The child was still-born.

S. R. MILLER, M. D.

Dunbar, Nebraska.

Letter from Dr. S. Weir Mitchell.

EDS. MED. AND SURG. REPORTER:—

Will you kindly publish the following statement, made necessary because of my receiving letters from England and this country calling my attention to the liberty taken with my name?

Dr. H. H. Kane, of New York, has made use of my name in an advertisement of a secret means of treating the opium habit; and afterwards, in a pamphlet labeled "De Quincey Opium Home Cure," printed fac-similes of letters received by him years ago from a number of physicians, and among them a letter of mine. In obedience to a protest on my part, Dr. Kane has removed my name from his advertisement, and my letter from his pamphlet.

Yours truly,

S. WEIR MITCHELL, M. D.

December 22, 1883.

A Formula for Koumiss.

EDS. MED. AND SURG. REPORTER:—

I enclose you a formula for koumiss as follows, for family use: Take of milk one quart, $\frac{1}{4}$ of a teaspoonful bicarb. soda, $\frac{1}{2}$ of a cake of compressed yeast, two tablespoonfuls white sugar, three tablespoonfuls glycerine. Rub the yeast up smoothly with a small portion of the milk, and mix all together in a quart bottle, cork tightly, and keep in a temperature from 80° to 100° Fahr. for six hours, then in ice-box for twelve hours, and use.

This is the easiest method I have tried, and I think will suit very well for domestic purposes, but it differs from most formulæ published.

J. F. HAYES, Druggist.

Broad and Walnut sts., Phila.

NEWS AND MISCELLANY.

American Medical Literature.

In the course of an address entitled "The Place of Literature in Medicine," Dr. C. J. Cullingworth (*Lancet*, December 8, 1883,) says:

"One of the best medical monographs with which I am acquainted is on 'Diaphragmatic Hernia.' Its author is Dr. Bowditch, of Boston, U. S. A., and it is founded on an analysis of eighty-eight cases. In this little book, scarcely larger than a pamphlet, is brought together all that, by the most patient search, could be found relating to the subject 'in medical literature during the period 1610 to 1846.' Such work soon becomes intensely interesting, as I can testify from my own experience, and that Dr. Bowditch found it so appears evident from the concluding sentence of his preface, in which, after expressing the hope that the memoir will be useful to the future student, he declares that 'the examination of it can never afford any one a tithe of the pleasure or profit the original preparation of it afforded' to himself.

"I hold in my hand another typical example of a medical monograph, the subject of which is the 'History and Treatment of Placenta Previa,' and the author, again an American, Dr. William Read, of Philadelphia. It is larger than that of Dr. Bowditch, because it has reference to a less uncommon affection; but its execution is equally admirable. I should have liked to give you an idea of the plan pursued by each of these writers, as shown by the mode in which they divided their inquiries, and the special points elucidated in each chapter."

It is a pleasure to record English appreciation of our efforts, and it will, no doubt, serve to stimulate us to accomplish even more than we have done.

Professional Rewards.

The *Gazette Hebdomadaire des Sciences Medicales de Montpellier*, for June 30, 1883, tells us that Dr. Monnet last January, while passing through a certain street, went to the assistance of a drunken man whom he saw fall and injure his head. He had him taken to an apothecary's shop, gave him a medicinal mixture, and dressed his head, for which he received a severe blow with the fist. Ten minutes later the drunken fellow was walked out of the shop by a policeman. As the doctor was about to follow, the apothecary demanded 36 cents of him as the price of the mixture, which the doctor refused to pay. A few days later Dr. Monnet received two letters; one from the apothecary, summoning him before a justice of the peace; the other from the police authorities, requesting him to appear and give information regarding the drunken man. The doctor, being a very busy man, neglected to pay proper attention to these letters. Consequently in March last an officer presented himself with the intention of attaching the property of Dr. Monnet, and he found that by this time he had to pay for the sake of the law the sum of \$9.96.

The Effects of Opium Smoking.

From the *Med. Times and Gaz.*, December 8, 1883, we learn that Dr. Ayres, the British Colonial Surgeon at Hong Kong, in his report on the prisons in that colony for the year 1882, says that among the prisoners in the gaol who are set down as opium-smokers there have been no deaths, and he has not found among them any cases of disease which could be attributed to this habit. The heaviest smoker, a man who consumed in this way fifteen grains of opium a day, and had been a smoker for thirty years, weighed 107 pounds on entering the gaol, and in three weeks he gained 3 pounds, although he underwent penal diet, that is to say, for five days out of fifteen he had to subsist on rice and water only. Dr. Ayres declares the opium-smoker suffers much less from the enforced deprivation of the accustomed luxury at once than the tobacco-smoker, and there was no particular symptom caused by the deprivation. Many make no complaint at all.

Lack of Anatomical Facilities in Vienna.

The Vienna correspondent of the *N. Y. Med. Jour.* says that dissecting privileges in Vienna are

not all that they have been represented to be. Aside from the fact that the subjects are never injected with preservative fluid, and hence will keep but a short time, there is a curious, unscientific custom which prevails here, of lopping off a number of limbs, and dealing them out separately for dissection. Add to this the difficulty and annoyance which a foreigner experiences in trying to obtain fresh material, and the necessity of renting a private room in which to work (for the Vienna medical student has very crude ideas regarding the rights of his co-laborers); and it remains a matter of considerable doubt whether it pays for a graduate to spend much of his time here in practical anatomy. He may gain in quantity, but with a proportionate loss in quality.

A Fine Wine.

For a sound, generous, rich wine, combining the highest therapeutic effects with the minimum of reaction, we have found nothing superior to the Hungarian "Tokayer Ansbruch" imported and sold by Mr. L. Reich, 13 West Eleventh street, New York city. In cases of nervous exhaustion, debility from acute disease, impairment of energy from overtaking the powers, and to retard the gradual failure of the constitution from advancing life, we have seen ample evidence of its excellent results. It vindicates for wine the lofty position which it used to occupy in the *materia medica*, but from which it has fallen through the introduction of so many base articles under that name. Those who desire Mr. Reich's wines should write him directly, as he does not sell any of them through drug houses or the trade.

Coated Tongues.

The *Microscope* gives the following as some of the articles found by microscopical examination on coated tongues. Fibers of wood, linen, and cotton; fibers of spiral vessels; fibers of muscle, in one case eight hours after eating; starch grains; cheese mold; portions of potato skin; scales, moths, etc.; hairs from legs of bees; hairs from legs of spiders; pollen of various flowers; stamens of various flowers; hairs of cats, quite common; hairs of mouse, once only; hairs from various leaves; wing of mosquito, once; fragments of the leaves of tobacco, chamomile flowers, etc. A list ten times as long could be made, but *jam satis*.

The Boston Public Schools.

It has been decided that the reports recently made by the Sanitary Inspectors in regard to the condition of the public schools are to be carefully examined by a joint committee from the Board of Health and Board of Education, and needed changes are to be made in those buildings which demand immediate attention. It would be well for the future generations if the sanitary authorities of all cities should be consulted in reference to the public school buildings.

Typhoid Fever in New Haven.

The city of New Haven is having at the present time an epidemic of typhoid fever similar to

that of Providence in 1882. No definite, single cause can be assigned for the outbreak, and the *Providence Daily Journal* very wisely says:

"In New Haven, as in Providence, careful investigation finds sufficient local causes for the fever in more than seventy-five per cent. of the cases that exist. In New Haven, as in Providence, typhoid fever is a filth disease, and people, whether they live in palaces or in hovels, do not have the disease unless they breathe foul air or drink impure water."

Diphtheria from Defective Sewerage.

The investigation of the recent outbreak of diphtheria in the Blind Asylum at Batavia (N. Y.), by the State Board of Health, showed that the interior sanitary arrangements of the building were very defective, and that the large drain which conducted the sewage to a swamp back of the institution, and which was of concrete, had fallen to pieces, while the earth had caved in and blocked up the passage. The asylum will remain closed until the improvements now in progress under the direction of the Board have been completed.

An Outrageous Suit for Manslaughter.

A physician in London recently performed tracheotomy upon a child for diphtheria; the father sucked the tube to clear it, and contracted the disease. He then brought suit against the doctor for damages, claiming that the doctor ought to have sucked the tube himself. Failing in this suit, he instituted another for manslaughter, because the doctor did not cure his child. Such instances are enough to frighten a man out of the profession. Happily they are rare in this country.

OBITUARY NOTICES.

DR. THOMAS KIRKBRIDE.

Dr. Thomas Kirkbride, the veteran Physician-in-chief and Superintendent of the Pennsylvania Hospital for the Insane, died in this city, December 17, aged 75 years. His illness dates from an attack of pneumonia last March, though he really died from the natural exhaustion of vital power incident to his advanced age.

Dr. Kirkbride was born near Morrisville, Bucks county, July 31, 1809. His ancestors on both sides were, as he was himself, members of the Society of Friends, and were among the first settlers in Pennsylvania, and the associates and companions of William Penn. He received an academic education at Trenton and Burlington, N. J., and in the spring of 1828 studied medicine under Dr. Belleville, of the former place, and subsequently attended three full courses of lectures in the University of Pennsylvania, whence he graduated in March, 1832. In the following month he was appointed Resident Physician to the Friends' Asylum for the Insane, Frankford, in which position he served a year, and in March, 1833, he was elected Resident Physician at the Pennsylvania Hospital, where he remained two years, after which he engaged in private practice in this city, devoting himself principally to sur-

gery, which practice he pursued until December, 1840. During this period he was physician to various public institutions, among them the House of Refuge, Institution for the Blind, and Magdalen Asylum. In the fall of 1840 he was elected Physician-in-chief and Superintendent of the Pennsylvania Hospital for the Insane, a new establishment then recently completed, and to which it was proposed to remove the insane from the Pennsylvania Hospital, at Eighth and Pine streets. The new hospital was opened January 1, 1841, when he removed his family to the institution, and has since resided there, acceptably filling the position to which he was elected 42 years ago. During Dr. Kirkbride's administration the number of patients treated has increased from hundreds to thousands, and he has been instrumental in securing many decided reforms in the care and treatment of these afflicted patients. In 1854, the original building having become crowded, he recommended the erection of a new one on the grounds of the institution, and a complete separation of the sexes. He further recommended that the proposed building should be erected through an appeal to the public, which was accordingly made, and with entire success, the building being completed wholly from private contributions, exceeding in the aggregate \$355,000. The second building, which is now appropriated to males, was opened October 27, 1859.

Dr. Kirkbride has written a work on the "Construction, Organization and General Arrangement of Hospitals for the Insane," "Rules and Regulations for Hospitals for the Insane," and "Rules for the Government of those Employed in the Care of the Insane," besides contributing various articles and reviews to the *American Journal of the Medical Sciences*, the *American Journal of Insanity*, and other periodicals. He was one of the original founders of the Association of Medical Superintendents of American Institutions for the Insane, of which he was President for nine years, a manager of the Institution for the Blind from near the time of its first foundation, and present Vice President, a member of numerous medical and scientific associations, including the American Philosophical Society, Philadelphia College of Physicians, and the British Psychological Association, of which he was an honorary member. He has a son, Dr. Joseph L. Kirkbride, engaged in private practice in this city, and a daughter, the wife of Dr. Thomas G. Morton, the eminent surgeon. About fifteen years ago he married his second wife, Miss Butler, a sister of William Allen Butler, of New York, and who, with four children, survives him.

Dr. Kirkbride combined with his great mental abilities the rather unusual attribute among great men, of simplicity and purity of personal character. He was a truly great man, great in his objects and great in his accomplishments, and we feel that his death will leave a great void in the ranks to which he belonged.

Items.

—Dr. Philip Leidy recommends oil of citronella (two drops to the drachm) to disguise the odor of iodoform.

—Color-blindness in the navy is probably to be made the subject of an investigation by order of Congress.

—The Russian physician, Dr. Eck, sent to Egypt to investigate the cholera, says that it was undoubtedly imported from India.

—The *Pittsburgh Medical Journal* has temporarily suspended publication, owing to the prolonged absence in Europe of its editor.

—A medico-legal society has been organized in Philadelphia. Professor John J. Reese delivered an address before it at its opening session.

—Dr. J. Marion Sims is said to have left ready for publication a story of Revolutionary times, entitled "Lydia McKay and Colonel Tarleton."

—The German Cholera Mission has gone to Calcutta, instead of Bombay, as at first intended. Better facilities are to be found at the former place.

—In the *Med. Times and Gaz.*, December 8, 1883, Mr. Rickman Godlee reports a case of erysipelas following the use of chrysophanic acid for ringworm.

—An apparently well-marked case of Raynaud's disease is recorded in the *Gazette Médicale de Paris* for December 1st. There was glycosuria, but no mention is made of hemo-globinuria.

—An English physician states that he has known one of his prescriptions to be made up without his order to his patient more than three hundred times. He was paid for only one prescription.

—In a village called Strichen, near Aberdeen, Scotland, there was recently an epidemic of typhoid fever. The source of the infection has been traced to a farm which supplied the milk, and where there were cases of typhoid fever.

—The existence of a micrococcus of pneumonia has been confirmed by Professor Carl Friedländer, of Berlin, who has cultivated these organisms and produced croupous pneumonia by inoculating them in dogs and mice.

—The New York State Board of Health reports as a result of its investigation into the cause of malaria along the Hudson, that this disease has been brought about, in part at least, by the railroads making embankments which prevent free drainage into the river.

—The water supply of the city of Waterbury, Conn., drawn from Mad River, is reported to have become quite impure of late, owing, it is supposed, to the river having been tainted with refuse material from a number of factories that have been established on its banks.

—A communication to the Académie des Sciences, made by MM. Chambrelent and Moussons, has for its object the demonstration of the passage of the bacilli of charbon from the blood into the secretion of milk. The number of bacilli in the milk of affected animals is always much smaller than that in the blood, and may even be reduced to zero.

QUERIES AND REPLIES.

W. E. Moore, Derby, Ia.—Your query in relation to koumiss is answered in this week's journal.

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ORIGINAL DEPARTMENT.

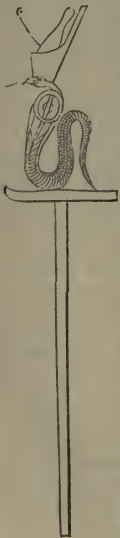
COMMUNICATIONS.

MEDICAL SYMBOLISM.

BY T. S. SOZINSKEY, M. D.,
Of Philadelphia.

(Continued from page 5.)

One can advance sufficient evidence to indicate with considerable conclusiveness that the Egyptians were in the habit of looking to a serpentine divinity for the cure of disease. In his work, already quoted from, Sharpe gives a figure of a snake, wearing the crown of Upper and Lower Egypt,* on a pole, a cut of which is reproduced



here: (Fig. 5), which was carried in the periodical airing procession of the Egyptian divinities. Now, it is more than probable that Moses was very familiar with this figure and its import; but at any rate, we find him making an imitation of it, and for what purpose? The story is told in the Bible,† and runs thus: "And Moses made a serpent of brass and put it upon a pole; and it came to pass that if a serpent had bitten any man, when he beheld the serpent of brass he lived."‡ Verily, there is the healer in essentially the same form in which he was embodied by the Romans. Hence, it is very certain that the serpent as a symbol of medicine took shape before the time of Æsculapius, long before, for

FIG. 5. Moses lived nearly 400 years earlier

than he, and as we have just seen, it was likely far from new at his time.

But the association of the serpent with Æsculapius, as a remnant of a form of serpent-worship, may have come as a direct inheritance, like the laurel, from Apollo, the sun-god, with whom, as we know, one was, almost everywhere, sacred. Mr. C. F. Keary maintains, in his able work,* that the tree, mountain and river were the three great primitive fetich-gods of the early world, and forcibly argues that a serpent was the symbol of the last, which, it may be noted, is nearly always a life-giving power. Without pretending to account for their original worship, he "takes it for certain that at a very early time rivers became through symbolism confounded with serpents." Remnants of these fetichisms are preserved in later and more abstract cults, and may be largely found in Indo-European mythologies. The monstrous python which Apollo encountered and destroyed at Delphi was simply a river, and a harmful one, ulteriorly a river of death. The Fardarter, through his arrows (rays), dried up the water. "The reptile was, we know," says Mr. Keary, "before all things sacred to Æsculapius, and was kept in his house, as for example in the great temple of Epidaurus. It would seem that the sun-god has the special mission of overcoming and absorbing into himself this form of fetich. This is why Apollo slays the python, and why the snake is sacred to Æsculapius." Between tree- and serpent-worship the connection is close, as

said of Hezekiah (2 Kings xviii. 4) that "he removed the high places and brake the images and cut down the groves, and brake in pieces the brazen serpent that Moses made; for unto those days the children of Israel did burn incense to it: and he called it Nehushtan."

* Outlines of Primitive Belief.

* Vide description in Exodus xxviii. and xxix.

† Numbers xxi. 9.

‡ This idol was not appreciated only for a time, for it is

one would expect from the close connection in nature between rivers and trees.

It is proper to state, although I must be brief, that there are other ways of explaining serpent-worship besides that so ably advocated by Mr. Keary. It is suggested by Fergusson* that the longevity of the reptile may be one reason for it, and its mysterious and deadly power another. One of the most tenable theories is the phallic, † and another which is held by many is the astronomical. Says Lillie, ‡ “Like all old religious ideas, the serpent symbol was probably in the first instance astronomical. Two thousand eight hundred and thirty-six years before Christ, a large star was within one degree of the celestial pole. This was the *a of Draco*.” Much interest was taken in it, as readers of the works of Messrs. Piazza Smyth and Proctor are aware. The constellation of Draco, or Dragon, was represented in ancient astronomy by a serpent twined round a tree, the prototype of which likely was the *Asclepias acidi*, the source of soma, the original intoxicant of the Aryans. With Draco, the Supreme Being and paradise were associated. Two snakes on a staff, an emblem very similar to the caduceus of Hermes or Mercury (the wind god), constitute the *Tria Ratna* of Buddhism, “the three precious symbols of the faith.” “These very ancient symbols,” says Lillie, “are Buddhist symbols, but they plainly indicate also the inner teaching of Vedism, the father and mother and the solar ‘golden germ.’” The symbol of Draca may be the prototype of Serapis, the serpent-encircled Egyptian god, as well as the staff and climbing serpent of *Æsculapius*. I may add that Plutarch || holds that the serpent-symbol of the supreme god, *Uraeus*, was the cobra di capello (*naja tripudians*), the rather venomous viper still worshipped in India.

As several medical symbols cannot be understood without a knowledge of the history of the half-mythical *Æsculapius*, I will explain those calling for special notice in connection with a sort of sketch of the god. An extremely remarkable history it is, and certainly of much interest to all medical readers.

As was a rather common event in the days of yore, if ancient writers are to be believed, *Æsculapius* was the offspring of an attractive young virgin named *Coronis*, a native of Thessaly, by one of the immortal gods, the gallant Apollo

himself, who, as I have stated above, was, in connection with his other functions, the Grecian god of medicine until his healing and life-giving powers were exercised by his son.* We learn from Homer, † that during the progress of the Trojan war, medical service was not infrequently invoked from Apollo (*Pæon*). Thus he was called on when the Lycian chief, *Sarpedon*, was wounded—

“Apollo heard; and suppliant as he stood,
His heavenly hand restrained the flux of blood;
He drew the dolours from the wounded part,
And breathed a spirit in his rising heart.”

The famous Hippocratic oath, which was taken by the medical student at his entrance on the study, begins with these words; ‡ “I swear by Apollo, the physician, by *Æsculapius*, by his daughters, *Hygeia* and *Pomaria*, and all the gods and goddesses.” Bacon ventures to say || that it was well for the poets “to conjoin music and medicine in Apollo, because the office of medicine is but to tune this curious harp of man’s body and reduce it to harmony.”

The laurel crown given to *Æsculapius* has been held by some to have been accorded to him, because he was the son of Apollo, the laurel being specially consecrated to the latter. Another way of accounting for it, is as stated by Tooke, § “because that tree is powerful in curing many diseases.”

The name of the mother of *Æsculapius*, *Coronis*, in Greek signifies crow. This is given as the reason why the crow was consecrated to the god. Another reason is because that watchful bird brought the unpleasant news to Apollo that the sly *Coronis* was secretly keeping company with a youth of her neighborhood (*Ischys*)—a piece of service which was unkindly rewarded by changing the tale-bearer from white to black, put permanently in mourning for the unfaithful maid.

In this connection I may remark that Thessaly, a region in which poisonous herbs abounded, was regarded by some, as, for example, Strabo, as the place of nativity of *Æsculapius*, as well as his mother. Referring to this, Blackie ¶ says: “That the knowledge of medicine came to the Greeks originally from Thessaly, one of the earliest seats

* A writer in Smith’s “Dictionary of Grecian and Roman Antiquities” remarks that the personification of the healing powers of nature is “naturally enough described as the son (the effects) of *Helios*—*Apollo*—or the sun.”

† *Iliad* and *Odyssey*.

‡ Vide the works of Hippocrates, translated and edited by Adams.

|| *Op. cit.*

§ *Pantheon*.

¶ *Homer and the Iliad*.

* Tree and Serpent Worship.

† Vide note later.

‡ Buddha and Early Buddhism.

|| Isis and Osiris.

of Hellenic civilization, is evident from the pedigree of Coronis." However this may be, it is interesting to observe that there is testimony in Homer going to show that Egyptian medicine was in repute during the Homeric age. Thus, to remove the grief and rage caused by the death of brave Antilochus, we are told* that the famous Helen (a Spartan), who takes, on the occasion, the role of a "woman doctor,"

"Mix'd a mirth-inspiring bowl,
Temper'd with drugs of sovereign use t' assuage
The boiling bosom of tumultuous rage.

* * * * *

These drugs, so friendly to the joys of life,
Bright Helen learn'd from Thone's imperial wife,
Who sway'd the sceptre, where prolific Nile
With various simples clothes the fatten'd soil.†

It was the luck of Æsculapius to be an orphan from his birth, if birth he had, to speak correctly. When Apollo found that the conduct of Coronis was bad, he became very angry, as was to be expected, and ordered Diana to destroy her through a stroke of lightning, which was done. But he thought it well to save the child; and to do this, it is to be presumed, the operation now known as the Cæsarian was hastily performed. The operation was successful, but what to do with baby Æsculapius, who, it is not unlikely, was brought into the world prematurely, was puzzling to Apollo. It appears that the little unfortunate would likely have perished had it not been for the friendly offices of a goat and a dog. The goat gave the precious *enfant trouvé* nourishment, while the faithful dog guarded him from harm. Hence it is, we are told, that these animals came to be associated with him, the former in sacrifice. The dog has been given the credit of nourishing him, and the frequent association of the goat with him afterwards is explained otherwise than as stated above, namely, because, to use the words of Tooke,‡ "A goat is always in a fever; and, therefore, a goat's constitution is very contrary to health."

In progress of time, Apollo took care that Æsculapius should not grow up in ignorance; so the boy was put under a master, and a strange one, too, Chiron, who was very monstrously formed, his figure from the waist down being the body of a horse. This strangely-formed individual, a centaur, directed the attention of his pupil to the study of the medicinal virtues of plants; for he was a great herbalist, being called by Homer, in

the words of Pope, "the Sire of Pharmacy." A symbol in the form of this Thessalian monster is of pharmaceutical significance.

I am not particularly called on to speak further of Æsculapius personally, but I deem it desirable to say a few words about his medical career and other points, so as to make the sketch complete. His knowledge of drugs became greater than that of his master, Chiron, and his practical skill as a physician touched on the supernatural. His patients did not die, and a few he recalled from "the shades below." Of his plans of cure, Pindar,* after speaking of the sick that flocked to him, says:

"Some spells brought back to life;
These drank the potion bland; for these he bound
With drugs the aching wound;
Some leaped to strength beneath the helpful knife."

His great success in curing the sick, and especially his recalling some from the other world, led to his destruction. Pluto, the God of the infernal regions, not wishing a sparse population, became displeased with him and complained to Jupiter, who, likely believing that he was becoming too powerful, cut short his career through a thunder-bolt.

In the celebrated ode quoted from above, Pindar declares that the efforts of Æsculapius to recall the dead to life were inspired by temptation with gold; he says:

"Alas! that filthy gain can blind the wise!
The glittering gold betrayed the noble leech."

Making this ugly charge is probably unjust to the great physician. The historian Grote,‡ thinks so, and expresses the idea that Pindar was disposed "to extenuate the cruelty of Zeus by imputing guilty and sordid views to Æsculapius."

In the references of Homer to Æsculapius, he appears as simply a mortal, a fact which Blackie characterizes as remarkable; but after his death an Æsculapian cultus spread rapidly. As Cox says,‡ "there were few divine personages more widely honored than this son of Apollo." Temples called Æsclepiea were erected to him, to which patients flocked to be healed. At these resorts, one or more nights were passed, during which rules laid down by the priests were observed. The cure was usually suggested by a dream. The medical attendants or priests, in the Æsclepiea, were called Æsclepiades. Through the votive tablets, some of which are yet extant, which told more or less of the treatment, a considerable deal

* Odyssey, b. iv.

† Vide also note on Phæon below.

‡ Op. cit.

* Third Pythian Ode.

‡ History of Greece.

‡ Comparative Mythology and Folklore.

of medical knowledge was accumulated in these institutions. In the introductory remarks to his excellent edition of the works of Hippocrates, Adams says: "When we come to an analysis of the different Hippocratic treatises, it will be seen that there is strong reason to believe we are still in possession of two documents composed from the result of observations made in the ancient temples of health." That great author, the prince of physicians, as he was called, I think, by Pliny, gathered much of his knowledge at the Æsclepon of Cos, one of the most famous, as I have already said, a few centuries before the Christian era, and, of course, covered forever with éclat by its illustrious alumnus.

Æsculapius was married, as every respectable physician should be, and as was desirable in an exemplar, the father of six children, two sons and four daughters, of whom both the former, Podalirius and Machaon, taught by their "parent god," were "famed surgeons," "divine professors of the healing arts," according to Homer, in the Trojan war, and of the latter, one, Hygeia, became the goddess of health. Hippocrates probably traced his pedigree to Podalirius.

I have said that a goat was frequently sacrificed to Æsculapius. This was most often done by the Cyrenians. A more common sacrifice was the domestic cock, a very watchful bird, a fit symbol in medicine. Socrates has, through Plato,* made this memorable. Said the dying sage, as he felt his limbs grow cold: "When the poison reaches the heart, that will be the end." Feeling his body gradually losing its vital heat, and realizing that relief from his troubles was at hand, he said (they were his last words): "Crito, I owe a cock to Æsculapius; will you remember to pay the debt?" "The debt shall be paid," responded his friend.

There is yet another symbol connected with figures of Æsculapius, to which reference has been already made, about which I must say a few words. I refer to the child Telesphorus, likely a sort of genius or



FIG. 6.

dæmon, such as that of Socrates. A cut (Fig. 6), copied from Tooke,† minus the laurel branches,

in which he appears wrapped in a mantle, is given. He is barefooted. Figures of him vary considerably in appearance. He is generally regarded as symbolic of the sustaining vital force, the *vis medicatrix nature*, upon which greatly depends the recovery of the sick.

Health is symbolized in Hygeia, the pretty

"Daughter of Pæon,* queen of every joy,"

to use the appropriate words with which Armstrong starts off in the invocation to her, at the beginning of his fine poem.† At least one figure of the goddess is doubtless familiar to my readers, that in which she is represented as a blooming maid with a serpent twined around one of her arms, and feeding out of a patina, or chalice. Referring to this ideal, Dr. Aitken Meigs, who died too young, in a remarkable farewell address to students, delivered in 1879, pronounces "the high-born maid" to be

"Of beauty's types the highest, best idea,"

and continues:

"Nor fragile she. nor pale, but ruddy, strong,
And gladsome as a tuneful, joyous song;
Her comely form, in swelling curves designed,
Is perfect grace, with glowing strength combined;
Crimson and white in her fair face contend,
Upon her cheeks in sweet confusion blend;
Her rosy lips excel the coral's brightness,
Brow, nose and chin are fleecy ways of whiteness;
Loose flowing falls her hair, a golden spray.
Forth from her lustrous eyes, she scatters day.

* * * * *

In one small hand a cup she deftly holds,
Whist round her soft, white arm in many folds
A serpent twines, and from the chalice drinks.
Low crouches, sometimes, at her feet, a sphinx.
From these strange emblems learn her character;
How very cunning she, and how exact her
Knowledge and profound; how with wondrous skill
Her youth renews; and is discreet and still."

Dr. Meigs not inaptly says that this is to the physician what the chosen maid was to the knight of old, the patron saint. He believes that "in all probability Hygeia is derived from Mant or Mut, 'the mother goddess' of Egypt," as well as that "Æsculapius is doubtless the Egyptian Thoth, or Hermes Trismegistus, whose symbols,

* Pæon, or Pæon, was the name frequently given, after the time of Homer, to Æsculapius, as well as his father (Apollo). It is the one always used by Homer in speaking of the physician of the Olympian gods. Thus in reference to the source of the medical knowledge of the Pharian or Egyptian race, it is said (Odyssey, b. iv.):

"From Phæon sprung, their patron-god imparts

To all the Pharian race, his healing arts."

"Pæonian herbs" is the phrase made use of by Virgil (Æneid, b. vii.) in his account of the restoration to life of Hippolytus, and elsewhere.

‡ The Art of Preserving Life.

* Phædo.

† Op. cit.

the staff and twining serpent, surmounted with the mystic hawk of Horus Ra and the solar uræus, appear in the ancient temple Pseleis, near Dakkeh, in Nubia."* The explanation of the symbols connected with the figure of the goddess given is all very well, except, perhaps, in regard to the import of the serpent. Taking the reptile to be symbolic of the art of healing, why it should be connected with the goddess of health is not very obvious. In this connection its presence may possibly imply that it is only through medical knowledge that health can be preserved. The chalice is not always present, and as indicated in the verses, neither is the sphinx. I will give a



FIG. 7.

cut of the goddess copied from DeWilde's book, in the attractive form in which she appeared on an antique gem (Fig. 7). One might raise the objection that the serpent is too long to be of the Æsculapian species.

I have said that the cut of the goddess given is from a gem; and a very appropriate thing it would be on, say, the seal ring of a physician.

And this reminds me that a ring was from the earliest times, and until recently, regarded as a necessary item of the insignia of the medical man, one of the indispensable things to have in order to be suitably prepared to justly exercise the healing art. It is spoken of, I believe, in one of the spurious Hippocratic works. Different stones in it differently engraved gave it different uses and powers. Another item of the insignia referred to was the gold-headed cane. As seen in the last century, it was smooth and varnished. The gold head may have had some significance; it was at least suggestive of the physician's reputed love of the precious metal. It will be

remembered that in the famous description* of his doctor, Chaucer says, and with charming casuistry:

"For gould in physike is a cordial;
Therefore he lovede gould in special."

Carrying a gem, whether in a ring or otherwise, with a symbol of health engraved on it, was, of course, a superstitious practice—a practice not at all objectionable, if it inspires hope and fortitude. Many a wise man, however, has carried a symbol of health, to serve to preserve his own, just as many a one has worn a red string around his neck to keep off small-pox, or gone about his business with a chestnut in his pocket to prevent an attack of rheumatism. This plan of holding diseases at bay inspired the making of many symbols of medical significance; that is, medical amulets. The abraxas stones, of which much has been said, were largely such. On each there was generally some figure or inscription together with the word ABRAXAS,† which constituted the characteristic feature.‡ The Greek letters of this mystic word equaled in numerical value,|| 365, the number of days in a year. A cut of one of these stones is given by Sharpe.§ After speaking of the serpent of evil on it, he continues: "Underneath it is written the magical word abraxas, *hurt me not*, an Egyptian word which the Greeks made use of as believing that the evil spirits were better acquainted with the Egyptian language than with the Greek."¶ Not a few believe that the word is not such at all. At any rate, the abraxas stones are believed to have originated with the Basilidean Gnostics. Large numbers of them have been found in Egypt, Spain and elsewhere. I may add here, that in De Wilde's book a talismanic gem is pictured, on one side of which are the Greek letters ΙΑΩ, signifying God; and on the other a representation of an extremely *erotic* and rather misshapen lion rampant, which worn in a ring was said to prevent renal and other diseases. De Wilde observes, and in accordance with a belief of ancient date, which I cannot dwell on,¶ that

* Canterbury Tales.

† This should not be confounded with the word ABRACADABRA, which, however, was long reputed to be of great efficacy when brought to bear against agues and other fevers.

‡ The cut of one at the end of this article is copied from an engraving of one in De Wilde's book. On the reverse side was shown a lion with a prey in his mouth, and a star between his legs.

|| The first, letter 1; the second, 2; the third, 100; the fourth, 1; the fifth, 200; the sixth, 1; and the seventh, 60.

§ Op. cit.

¶ On second thought, I deem it wise to add a note on this curious and important matter. The *linga* of the Hindus

* Hygeia may have sprung into existence as a personification of the great serpent-accompanied virgin, river-mist or cloud goddess, Pallas Athene (Minerva) in her capacity of Healer. The Egyptian goddess corresponding with Minerva was Neit or Neith, the great mother who gave birth to the sun-god, Ra, and the tutelar goddess of Sais. As to the Egyptian god corresponding with Æsculapius, Dr. Erasmus Wilson, in his "Egypt of the Past," says: "Imhotep, the Imuthes of the Greeks, corresponded with their Æsculapius." Imhotep was a king of the sixth dynasty. He was the son of Ptah and Sekhet. Ptah, the father of the gods and the great artificer of the world, has been taken to correspond with Vulcan (Hephestus), who had the gift of healing.

in this one was health symbolized; says he: "Leo erectus verum signum sanitatis protendit."

I might go on and speak of that peculiar symbol placed at the head of prescriptions, and taken by the practical physician to mean *Recipe*, but which is a symbol of Jupiter, whose good influence was, in other days, generally invoked when remedies were prescribed—and the physician's color, yellow, with others, such as the red-striped pole, now regarded as the symbol of the mere barber, and the skull and cross-bones—but enough has been said to give some idea of the scope of medical symbolism. In extent it is evidently not very limited, nor is it without variety and the means of variety enough. Yet, how little use does one see made of it! How seldom do publishers take any advantage whatever of it on the covers of their books or anywhere else! And what little is here and there attempted is apt to be a trifle preposterous, on a par almost with the misuse of the serpent by the quack-medicine man who confounds the religious (Christian) significance of it with the medical. Here is a medical publisher who makes use of the caduceus of Mercury, there one the club of Hercules with a rather venomous-looking snake crawling down it from—heaven only knows where—and so on. And there I see a

the *phallus* of the Greeks, and the *penis* of the Romans, in the form of an "upright" sacred tree, or tree of life, named by the Jews *asherah* (vide Rawlinson's "Ancient Monarchies," Vol. II.), and mistranslated, perhaps purposely, in the Bible, *grove*, as in the phrase, "where the women wove hangings for the grove" (2 Judges xxiii. 7), appeared on the circular altar of Baal-peor of the Moabites and Midianites, and some of the Israelites (vide Numbers xxv. and 2 Judges xxii.)—the Triapus of the Greeks and Romans. This object has been taken by many peoples as symbolic of the widely worshiped, active, renewing, generative power in nature, the sun, called Horus by the Egyptians, Asshur by the Assyrians, Baal by the Phœnicians, Apollo by the Greeks, etc., just as an oval or round figure, the *yoni* of the Hindus and the *cleis* of the Greeks, has been of the passive power, the earth. "As such," says Cox, in his philosophic work, already quoted from, "the symbol became a protecting power, like the Palladium which guarded the city of Troy, the rod or staff of wealth placed in the hands of Hermes, the budding thyrsus of the worshippers of Dionysus, and the sistrum of the Egyptian priests. The rod thus grew into a tree of life, and in conjunction with the oval emblem became the stauros or cross of Osiris, the Egyptian symbol of immortality, the god himself being crucified to the tree, which denoted his fructifying power." "When we add," says the same author, "that from its physical characteristics the *asherah* suggested the emblem of the serpent, we have the key to the tree and serpent worship." The tree worshipped was an upright statue or post, occasionally with sprouts. The phallus-serpent was never regarded with dread, or looked on as other than a beneficent and life-giving power.

In accordance with these ideas, both the serpent and staff of Æsculapius may have been of phallic origin.

journal devoted to anatomy and surgery with a seal on its back, in which appear heads of Vesalius and Paré, an emblem of anatomy and surgery, about as expressive and appropriate as one consisting of heads of Washington and Bismarck would be of war and conquest. But perhaps a little, even if bad, is better than nothing. Anything modern that is worthy of attention is rare. I may take note of a fair specimen.

On the title-page of a journal edited by the late Dr. Dunglison, a learned and sensible man, *The American Medical Intelligencer*, which had a brief existence in the latter half of the fourth decade of this century, appears the symbol, the cut of which is given (Fig. 8). The idea is obvious and is good, but is poorly executed.



FIG. 8.

Ideas for symbolic designs of medical significance are plentiful enough. The instruments and drugs used by the disciples of Æsculapius afford a host, if one does not wish to take advantage of mythological or allied hints. If it be desired to give an Egyptian design on the cover of a book, say on obstetrics, the main part of an admirable one may be found ready at hand on the wall of the great temple at Luxor.* It is the scene, and a sufficiently chaste one, of the maiden mother giving birth to the future king, Amunotoph III., for whom the temple or palace was erected about 1400 B. C. She is seated on the midwife's stool, as described in Exodus i. 16, while two nurses have her by the hands, doing what they can to ease the pains of labor. But for a design of obstetrical import there could probably be few better than one in which prominence were given to the good housewifery symbols, the pestle, hatchet, and broom: those respectively of Pilumnus, a god of children; ntercidona, the goddess who first taught the art of cutting fire-wood; and Deverra, the goddess who invented the broom, that great instrument of cleanliness, and enemy of that Python, or I may say Hydra, of many modern doctors, the disease-germ; the deities that save the pregnant woman from harm from her special enemies, the unclean sylvan gods. The broom! wise old Romans! wiser than the moderns with bottles of carbolic acid in their hands. And with these symbols, especially if the design were wanted for a work on obstetrics by a female author, there might be given a figure of

* Vide Sharpe's "Egyptian Mythology."

the goddess Juno Lucina, the special friend of women in labor. Or if the author had no respect for the classic divinities, and had faith enough in magical healers, a figure of—I need not mention whom, for I fear it would be hard to find a modern doctor who has regard enough for these traditional heroes to desire to place the image of one, even if an old specialist of great renown, on the back of his book.

By way of conclusion and at the risk of running too deep into occult knowledge, I will give some account of a remarkable magic figure, of interest to the physician, about which little is generally known, but which is often referred to in certain out-of-the-way lines of study. I refer to the pentacle, triple triangle, or pentalpha of Pythagoras, the formulator of a celebrated system of philosophy, the basis of which is numerical.* A



Fig. 9.

representation of it in its simple form is given herewith (Fig. 9); and it will be observed on inspection that it has five arms or points, five double triangles, with five acute angles within, and five obtuse ones without; so that if there is the virtue in the number five which the occult philosophers have asserted there is, it must have much. It is in fact the famous legendary key of Solomon, which has played a notable role in history. Tennyson,† one of the few well-known authors by whom reference to it is made, speaks of it when he makes one of his characters (Katie) draw (it can be done through one stroke),

"With her slender pointed foot
Some figure, like a wizard's pentagram,
On garden gravel."

I have said that little is generally known about the pentacle. Here is some evidence. Ruskin‡ defines it to be "a five-pointed star or a double triangle ornament, the symbol of the trinity," a wrong definition, but not quite so bad as that given in Mollett's handsome new work,§ namely, "a figure formed of two triangles intersected so as to form a six-pointed star." The opinion is expressed by Bayard Taylor,§ that the magical powers attributed to it could be explained by the fact that being made up of three triangles, it was a "triple symbol of the trinity." This might be true, but it was regarded as possessing mysterious powers long before Christianity originated.

* Vide The Pythagorean Triangle, by George Oliver.

† The Brook.

‡ Art Culture.

§ Dictionary of words used in art and archaeology.

‡ In his notes to "Faust."

A common mistake, the one evidently made by Mollett, of even learned writers, as for example, Oliver* and Fairholt,† is to confound the pentacle with the seal of Solomon or David, which consists of two deltas or equilateral triangles, so arranged as to form a six-pointed star.

By the German writers on magic and kindred subjects, the pentacle is often called *Drudenfuss* (wizard's foot), a term which Mackey‡ takes to be a corruption of the term for Druid's foot, by which people it was in use, being often worn on their sandals. As Bayard Taylor, however, says: "*Drud*, from the same root as *Druid*, was the old German word for wizard."

This symbol has been extensively as well as long used. It has been observed on a figure of Anubis in Egypt. It is stated|| that it was used on coins of Antiochus Epiphanes, and also§ of Lysimachus. The statement I have seen made somewhere, that it is one of the old sect-marks of the Hindus, is an error, I believe. By referring to Coleman's¶ or Birdwood's** work, it will be seen that it is Solomon's seal that has been so used.

The pentacle has been accorded great potency and extensively used, to keep off witches and all sorts of evil influences, including the devil himself, and hence has served purposes very similar to those to which the horse-shoe has often been put. Aubrey†† says that it was formerly used by the Greek Christians as the sign of the cross is now, "at the beginning of letters or books, for good luck's sake"—something which old John Evelyn was wont to do in his books, and as Southey placed the puzzling monogram,‡‡ meant, perhaps, to have similar significance, on the title-page of his work, "The Doctor." It may be seen on many a cradle and threshold at the present day in the Fatherland. The readers of Goethe's great work||| will remember that Dr. Faust had one on his threshold, and that when he began to perceive that there was something suspicious about

* Op. cit.

† Op. cit.

‡ Encyclopædia of Freemasonry.

|| In Broughton's "Italy," Vol. II.

§ Notes and Queries, 3 Series, Vol. IX.

¶ Mythology of the Hindus.

** Indian arts.

†† Remaines of Gentilisme and Judaisme.

‡‡ Three equal triangles formed by a line from each angle of an equilateral one to a point in the centre.

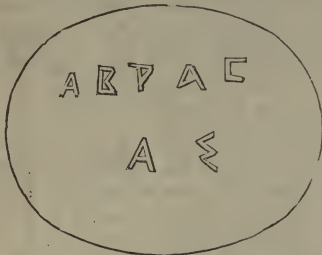
||| Faust.

the character of the "poodle," he remarked that,

"Für solche halbe Höllenbrut
Ist Salomonis Schlüssel gut."

How he got in, Mephistopheles himself afterwards explained by showing that one of the angles of the "Drudenfuss" was left open.

Disciples of the Samian sage, Cabalistic Jews and Arabians, and others, long regarded the pentacle as a symbol of health, and made use of it as a talisman, calling it Hygeia, the name of the goddess of health. It was so-called, and to some extent likely for a similar reason, regarded as a sacred symbol of health, because it could be resolved, it was believed, into the Greek letters which form the word Hygeia, and these letters* were placed one on each arm of the figure, as is done in the one † at the head of this article. It was regarded, in fact, as a sort of rebus of the name of the celebrated daughter of Æsculapius.



The scholarly and ingenious readers of the REPORTER may be able to trace more or less definitely this traditional similarity. It is an interesting point about what is certainly a very remarkable figure.

NON-CONSUMPTION OF FATS BY PHTHISICAL PATIENTS.

BY G. W. JOHNSON, M. D.,
Of Savanna, Ill.

The writer in a limited way, such as falls to the lot of a country practitioner, has observed among all his phthysical patients, without an exception, an aversion during their entire lives to the consumption of fats. The peculiarity is observable, as in the nursery rhyme of "Old Jack Sprat, who could eat no fat, and his wife who could eat no

lean," among people generally, that while many enjoy fatty food, eating a large proportion of fat with their meat, or even taking a mouthful wholly of fat, others carefully exclude everything except the muscle, the taste and idea of eating fat being repugnant in the extreme.

My object in calling attention to this matter, is to direct the attention of others to the subject, and ascertain if their observation has been in accord with mine.

I have been so uniformly impressed with the fact, that I often make use of it as an aid to diagnosis, and when a patient presents him or herself, for advice, with symptoms which are suspicious, and look rather toward tuberculosis, and the patient is quite anxious as to the result of the trouble, and I can, on making inquiry, ascertain that they are lovers and eaters of fat, I feel a reasonable sense of security, and give them encouragement to hope for a happy termination of their difficulty.

It is well known that fats, especially cod liver oil, have a powerful influence for good, when administered to consumptive patients, this form of fat only being selected because of its easy assimilation. Would not good fat beef taken *ad libitum*, be equally efficient, granting that it be properly digested and assimilated?

Coming as I do from tubercular stock, having lost three sisters, one brother, and numerous cousins and other relatives from consumption, I have had a chance to notice the fact that in their cases they all were eaters of lean meat only, while my father, through whom the predisposition seems to have been transmitted, escaped, and died at the age of 88 years, of other disease, and had been a lover and eater of fats.

Bennett, in Reynolds' practice (page 121, Vol. II), says: "An observation of the peculiar dyspepsia which so frequently accompanies tubercular disease, will satisfy the observer that it depends upon excess of acidity in the alimentary canal, which favors the solution of the albuminous and mineral matters, but is opposed to the emulsionizing of fat. It is the non-assimilation of fatty elements of food, and their diminution in the blood while the albuminous elements are comparatively in excess, that gradually interferes with nutrition; the molecular basis of the chyle is impoverished, the elementary molecules so necessary for the formation of healthy blood corpuscles are diminished, the liquor sanguinis consequently is poor in fat and rich in albumen, the entire growth of the constitution as a result is affected, and its powers rendered weak."

* Sometimes the synonymous Roman name, Salus, was so used. In Mrs. Palliser's work, already referred to, it is thus seen. It is there spoken of as a device used by Marguerite of France, wife of Henry IV., and the last of the Valois.

† This, as shown, forms one side of a "charm" of the writer's. It is of Masonic as well as medical and Christian in port, at least in its outline, and has an appropriate emblem of the kind on the other side.

The view here taken seems to be that it is a failure to digest owing to the "peculiar dyspepsia," rather than a natural repugnance to fats, which causes the difficulty.

I claim it to be largely a matter of taste, which might, and ought, to be corrected before the "peculiar dyspepsia" makes its appearance; let the young be encouraged to eat more fats, and protect their constitutions against being made weak by liquor sanguinis impoverished in fatty principles.

My first advice given to suspected cases is: cultivate a taste for, and eat as large a proportion of fatty food as possible, and by so doing escape the necessity for the nauseous cod-liver oil, which otherwise would soon be imperatively demanded.

If the eating of fat from childhood is a prophylactic of recognized worth, while the entire materia medica is vainly brought into requisition to stay the progress of the once-developed disease, it seems an easy matter to decide which is of the most importance.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE PHILADELPHIA HOSPITAL.

BY WILLIAM PEPPER, M. D., LL. D.,

One of the Physicians to the Hospital, and Professor of Clinical Medicine in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

The Treatment of Epilepsy. *Clinic*

By Prof. Pepper

GENTLEMEN: I shall to-day call your attention to ~~two~~ two men, who are suffering from epilepsy. In a hospital of this kind, we see the most unfavorable cases of this disease, for the sufferers rarely come to us until they have had a variety of treatment outside, and until the physical and mental condition has become seriously impaired by the disease. Although an institution of this character is one of the worst places for the study of the therapeutics of epilepsy, there is no better place for the study of the symptomatology, pathology, and diagnosis of the disease. I want you in the very beginning of our consideration of these cases to disabuse your minds of the idea that epilepsy is an incurable affection. In many cases it is incurable, yet there are many cases which are very amenable to treatment, epilepsy being, in truth, one of the most varied of diseases; varying in its gravity from a comparatively tractable condition, to a condition which is absolutely irremediable. I shall make the two cases before you a text for some practical remarks on the treatment of this disease.

This young man, a native of England, was healthy up to the age of four years, when he suddenly lost consciousness, and fell over, while sit-

ting at the table. One year afterward, the convulsion returned, and from this time he has been the prey of epileptic seizures, occurring at varying intervals. This is a bad case. It has been noted that he has had as many as one hundred and twenty convulsions in twenty-four hours. He states that when fourteen years old he fell into a trance, lasting for two or three days. After this, he enjoyed freedom from the epileptic attacks for two or three years. About five years ago hemiplegia of the left side came on. This has gradually improved, but the arm and leg are still paralyzed to a certain extent. In walking, he drags his leg in a clumsy way, after the fashion of an old hemiplegic. The muscles of the shoulder and arm still retain some power, but the flexor and extensor muscles of the hand are almost completely paralyzed.

The attacks are somewhat controlled by bromide of potassium and hydrobromic acid. He thinks that he has been improved by treatment. His memory has become much weakened, and all his statements must be taken with a certain degree of allowance. There is no evidence of fracture of the skull, and no history of his having received such an injury. The attacks are of the character of ordinary epileptic fits. The patient is taken suddenly, cries out, falls in a state of spasm, bites his tongue, froths at the mouth; the convulsions cease, and he passes into a state of coma, with heavy respiration. After a time, he comes out of this, seems dazed for a little while, and gradually returns to his usual condition. As is always the case with epileptic attacks, these spells occur at irregular intervals. He has gone considerable periods, he states as long as two or three years, without having an attack, while at other times they have come with great frequency. This irregularity is characteristic of the disease. Sometimes a cause which has served to provoke the attack may be found in indiscretion of diet, excitement, fatigue; but sometimes without apparent cause after the attacks have been occurring at intervals, there will be a group of fits after this, the spells may not again appear for a considerable time. I dwell upon this because it will be of importance when we come to consider the treatment, as showing how difficult it is to decide the effect of any line of treatment.

This second man is a machinist. He never had a fit until he was thirty-three years old. It came on suddenly, while he was at work. This man's memory appears to be good, so that we can depend on his statements. The attacks recurred at first at intervals of two or three weeks. Under treatment they became less frequent, but when treatment was stopped they increased in frequency. He has gone as long as four months without an attack, but they have never been entirely arrested. Immediately after the attack he passes into a state of mania, lasting from fifteen to thirty minutes. The attacks may be described as follows: He falls, froths at the mouth, works in a general convulsion, and sometimes bites his tongue. This lasts a minute or more; he then passes into a state of aggressive mania, throwing his arms and striking in a blind way around, injuring any one who happens to be near. His last paroxysm was on the fifteenth of August, three months ago, when he had a severe general convulsion, followed by

screaming, working of all parts of his body, and had to be held by several attendants. When asked where he felt bad, he said in his head, and screamed violently as though suffering greatly.

This case represents another form of epilepsy, and one more rare than that illustrated by the first patient. In the majority of cases, the disease shows itself in some form during childhood, or if the disease itself does not appear, the child will show a tendency to it. For instance, the child will have one or two convulsions when teething, or at the beginning of an attack of measles or scarlet fever, and after teething is over or these attacks of acute disease have passed away, the child will have no spontaneous convulsions for a number of years, and the parents will have entirely forgotten the circumstance, until the age of seven, eight or nine arriving, the child, without apparent cause, will again have a convulsion, and from that time be a confirmed epileptic. Such is very commonly the history. Still more usual is it for the occurrence of some accident to arouse this tendency to convulsion; for instance, a child who had shown this convulsive tendency in infancy, but which has apparently passed away, will have a fall, striking its head, and after that convulsions will be developed. This fall need not be followed by depressed fracture or symptoms of such severity as to suggest the production of meningitis; but merely a fall, giving a severe shock to the nervous system, such as many children may have without the development of such convulsions, and yet in these children, owing to the exaggerated tendency, the occurrence of convulsions will be established, and will pass into a habitual state. I suppose the fact is that every one is liable to have convulsions, which may be developed by an exciting cause of sufficient severity; but where, as in some, the tone of the nervous system and the hold which the vaso-motor nerves have over the circulation, is so strong and well sustained, that it seems impossible for any shock, mental or physical, to overcome it and throw the system into convulsions, in others a moderately severe, and in others a trifling shock, is able to produce this effect. In another class the tendency is so great that the convulsions occur from the most trivial causes, as fatigue, excitement, indiscretion in diet, or other form of reflex irritation. We recognize then, varying degrees in the tendency to convulsions, from the slight degree which has to be called into view by some powerful cause, up to the marked predisposition which is so intense that the slightest cause suffices to arouse it.

Before going on to speak of the form of epilepsy illustrated by this second patient, let me speak of some of the practical points in reference to these cases and the lines of treatment which grow out of them. In the first place, recognizing that this disease is merely an expression of the tendency of the nervous system to lose control of itself under provoking causes, you will search in these children for exciting causes. You will also seek for predisposing causes.

Among the predisposing causes, inheritance is a powerful one. When a child comes of a family of strongly marked nervous temperament, if several members of the family have exhibited symptoms of nervous disturbance, and if the child began at an early age to show a tendency to irregular

nervous manifestations, the probability is that there is such a profound morbid tendency of the nervous system, that no effort will control or eradicate it. Another predisposing cause is long continued exhausting illness. This may excite a tendency to convulsions at any age. A short time ago, a lady consulted me and gave the following history: she had been perfectly well up to five years ago, when she had a very severe attack of typhoid fever. This was complicated with hemorrhages, phlegmasia alba dolens of both legs, and relapses of fever, keeping her in bed for four months. After this passed away, and after she began to go about, she had a convulsion following some unusual exertion. For three years convulsions of an epileptic character continued, recurring at varying intervals, sometimes as frequently as twice a week, and at times being so severe as to require the strength of two persons to restrain her. Gradually, as her health improved, the attacks became less severe and less frequent. For the last six or eight months she has had no general convulsion, but has had periods of momentary oblivion, attended with severe pain in the region of the heart. She is evidently outgrowing the convulsive tendency, which was called into activity by the violent attack of typhoid fever. Last week I saw in consultation a case of the same character; a case of typhoid fever with severe hemorrhages leaving the patient in a state of the greatest debility. After the fever had subsided, the patient had a severe convulsive attack. Unless great care is taken I have no doubt that the convulsive tendency will show itself in that patient just as it did in the woman to whom I have referred. Where there has been no inherited tendency, and where the child has not shown a disposition to convulsions, these attacks after protracted disease are not of so unfavorable omen, as where they come on in consequence of a constitutional tendency.

I need not say to you that accidents in childhood often produce this tendency. It is exceedingly difficult to make the prognosis in such cases. Children so frequently meet with accidents, that it is exceedingly difficult to say whether the convulsions have resulted from a blow, or whether the child has an inherited tendency which is just showing itself. Still you will be pressed for an opinion by the parents. If there is any actual injury, such as a depressed fracture, or if the accident were followed by unconsciousness and paralysis or mental affection showing that the cortex of the brain had been involved, you will have no hesitation in expressing the opinion that some injury has been done, and according to the seriousness of the injury and its curable character, will be the prognosis. More frequently, however, you will be forced to conclude that the shock to the nervous system has excited the convulsions. If the injury has been slight, the prognosis is bad; but if the injury has been severe, the prognosis is more favorable. If there is evidence of permanent injury to the brain, the prognosis is of course unfavorable. In the case of this boy, I cannot say whether or not he has had a hurt, but we have in the hemiplegia evidence of serious intra-cranial disease. There has been in all probability, a lesion either in the corpus striatum or in the cortical centres corresponding to

the muscles of the left side, which has left behind it a loss of substance and a cicatricial condition of the brain itself, which is incurable. I should, therefore, in this case have no hope of eradicating the tendency to convulsions. It will be kept up perpetually by the organic lesion of the brain which exists.

A short time ago I showed the results of a post-mortem in the case of a physician who many years ago was thrown from his buggy, his head striking against a tree, causing a depressed fracture of the internal table of the frontal bone over the right eye. He immediately had coma, which lasted for two or three days. He recovered, and was apparently perfectly well from 1860, when the accident occurred, until 1881. He served in the army during 1881, and reached the rank of full surgeon. After leaving the army, he settled in a Southern town, built up a good practice, and laid by some money. He then moved North, buying a good practice in one of the towns of Pennsylvania. In 1881 he began having convulsions of intense severity, recurring at long intervals. When the case came under my observation, some eighteen months ago, it gave rise to some embarrassing questions. Had there been an injury to the bone so long as twenty years previously, which had remained dormant, and was there now developing some slow lesion near the seat of injury, the result of this hurt; or had the shock to the nervous system, causing the coma and unconsciousness, left no serious lesion, but now, in consequence of overwork and depressing influences, had there been a revival of this tendency without actual disease, and should we trephine this man or not? For a time we decided not to trephine; but the convulsions continuing, we did trephine, but it did no good; the convulsions continued, and the man died. The autopsy revealed an abscess in the anterior lobe of the right hemisphere, with a secondary abscess in the anterior lobe of the left side. There can be little doubt that a slow, irritative lesion had existed during all these years, and the brain became habituated to its presence; and it was not until a large area of the brain became involved, that the system responded to its influence and convulsions made their appearance.

In children with convulsions, where there is a history of an injury with perhaps some lesion of the head, you will often find it difficult to decide whether or not any operative interference should be adopted. Usually you will find that you cannot decide upon having the head trephined. Yet I am satisfied that we ought to trephine the head for epilepsy more frequently than we do. Whenever there is a lesion of the cranial walls, although there may be no depressed fracture, where there is possibly some lesion of the membranes, and where the convulsions cannot be controlled, my judgment would be strongly in favor of trephining. I have seen some most excellent results follow this treatment. The lives of these patients are so sad, and so sadden the lives of those around them, that although we may to a certain extent control the attacks, yet this is not very satisfactory, and therefore the chance of obtaining a radical cure is worth a good deal of risk.

Another and extremely difficult question comes up in the treatment of young children, such as

this lad was fifteen years ago, and that is the question of intellectual development and training. A child of five or six is attacked with epilepsy. Such children are often among the brightest and most intelligent, and frequently are even precocious in their intellectual development. Yet it is clear that if the brain becomes excited by study, too much reading, or violent play, the convulsions will become more severe and frequent. In presenting this question to parents, they have argued that it was better to allow the child to continue at school, for if allowed to grow up ignorant, and without mental training, he would, if shut out from the world by reason of his disease, be unable to occupy his mind, and might readily fall into vicious habits; and if the attacks should be relieved, he would, in consequence of his want of education, be unable to take his place in life. Therefore they have argued that it was better to take the chances of keeping up the disease than to allow the child to grow up in ignorance. To decide how far we should interfere with intellectual work, and how far the advantages of such interference counterbalances its disadvantages, is one of the most difficult problems to solve. My own judgment is decidedly against allowing these children to study or go to school. If taught, they should be taught at home, and emulation, ambition, and excitement of every kind should be studiously avoided. They should be taught, as far as it is proper to teach them, at home and not in schools. Specious as are the arguments pressed upon you by the parents against this plan, the results of yielding are usually bad. Epilepsy, even when taken at the earliest period, is not a disease which in my experience has been cured by drugs alone. When I have succeeded in eradicating this tendency, and the cases are not rare in which success has been attained, it has not been by drugs alone. It has been by the regulation of diet, regimen, and hygiene, and secondarily by drugs. But allowing the child to go to school, and when the convulsions become more frequent, increasing the dose of bromide of potassium, and when that loses its effect, changing to bromide of calcium, bromide of lithium, or hydrobromic acid, can have only one ending—and that is the enfeeblement of the whole nature of the patient, mental, moral, and physical, and the settling upon him of a hopeless bromide habit, without eradicating the epilepsy. There are some few cases in which a radical cure can be effected by drugs. There is a larger number of cases where with proper hygiene and the continued use of suitable remedies, the disease can be kept in check indefinitely. There is a still larger number of cases, and this may be said of almost all cases, in which if you depend upon drugs alone, and do not pay the first and closest attention to the regulation of every point of the daily life, you will find that the case goes from bad to worse, and that the effect of the drugs has been bad, without influencing the disease. There is an enormous amount of damage done by the way in which bromides are used in convulsive affections.

~~This question of the intellectual training and development requires the most careful consideration. The child requires a certain amount of training, and should be encouraged to use its mind in certain ways, for this exerts a beneficial~~

and tonic influence. As I have said, the stimulus of competition, as in schools, is always an injury. I can see no other explanation of these cases than that there is a state of febleness of the nerve-centres, whether congenital or acquired; and what is true of them is also true of adults, although to a less extent. These children, therefore, require a totally different arrangement of their daily life from that of healthy children. It should be based upon the fact that they are suffering from nervous prostration as well as nervous irritation. Of course, if the child has a positive lesion of the brain, we recognize that as a sufficient cause of the irritation and convulsions. In speaking thus I do not allude to those cases in which some source of reflex irritation has been allowed to continue and keep up the convulsions, but where, after the removal of all causes, the child continues to have convulsions. Such a child seems to me to be suffering from nervous prostration in a very real sense, and I think that the best results will be obtained by treating the child for that condition.

I should regulate the life of such a child in the following way: Go to bed at seven o'clock, and lie in bed until eleven o'clock in the morning; take a walk, come in and study, dine; after dinner, play or walk again, then rest and retire at the hour mentioned. Sometimes this can be carried out; at other times the child is so restless that any attempt to enforce such rules will do more harm than good. Where the child can be restrained, I regard prolonged rest in bed as one of the most useful adjuncts to the treatment of juvenile epilepsy. I have seen remarkable results follow this line of treatment. I recall a case in which I suppose a cure has been effected, for it has been a year since the child has had a convulsion. The patient was a boy, born of nervous parents, a boy of brilliant intellect, and ambitious in every way. He had convulsions while teething, and at the beginning of an attack of scarlet fever, when three years of age. He had grown well and appeared perfectly healthy up to the age of eight, when the epileptic attacks made their appearance. They proved obstinate and violent. He was removed from school and sent to a farm, allowed to play out-of-doors, and took bromides in moderation. The convulsions soon stopped, and for six or seven months he was free from them. He was regarded as cured, came home, went to school, and the same thing happened again. The fits proved intractable. They became severe and recurred with increasing frequency. He was again sent to the country, but this did no good, I decided to adopt more radical measures. I persuaded him to go to bed, and kept him in bed for three months constantly. During this time he took moderate doses of the bromides, and his diet was regulated with extreme care. The convulsions occurred less and less frequently, and finally stopped entirely, and he had none for several weeks. He was then allowed to get up for an hour each day. The length of time out of bed was gradually increased until he returned to his ordinary mode of life. He has not yet been allowed to return to school. I have seen this same result in many other cases.

The hour has nearly expired, and I shall, therefore, allude to only one more point to-day,

and it is one about which much has been said of late; that is the question of genital irritation, as provoking attacks of epilepsy. I think that too much attention and importance has been given to this point. I think that you will be doomed to disappointment, if you expect to have a great deal of good follow the circumcision of adherent and contracted prepuces, which is the most common expression of genital irritation. In the female, there are few local causes of irritation of the genitals. I know that there are cases in which an adherent prepuce with irritation of the mucous membrane has excited the convulsion, and after the removal of this cause, no other convulsions have appeared. Far more commonly, it will be found that children who, with an adherent prepuce, get convulsions, are epileptics in whom that may be one of the exciting causes, and although this may be removed, it will leave behind the epileptic tendency, and convulsions will occur from some other cause. In the case of the boy to whom I have referred, there is a contracted prepuce which I was anxious to remove, but the parents refused and the child has gotten well without the operation. In some cases, after the operation of circumcision, complete relief has followed; but in a larger number of cases, the condition of the prepuce has been found to be only one of the elements of irritation.

The same thing is true of worms in the intestinal canal. This is a rare cause, and still more rarely is it the only cause of irritation. We should, of course, carefully search for these causes of external irritation, and remove them, and above all, as far more important, should we see to it that there shall be no condition of intestinal irritation.

I shall devote the next hour to the consideration of epilepsy coming on in adults, and to the use of drugs in this disease.

(To be continued.)

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Traumatic Peritonitis.

GENTLEMEN: I want to give you the termination of the case of traumatic peritonitis which you saw here last Thursday (see REPORTER, vol. L., p. 12). It came to a fatal issue that night, death being preceded by a rising temperature, which finally reached the somewhat unusual point of 109° and a fraction. At the post-mortem examination there was found a rupture of the ilium at a point nine inches from the cæcum. This is in accordance with the suspicion which I had of the cause of the peritonitis, the pain and tenderness being too severe to be due to a peritonitis resulting from a simple contusion of the abdominal walls. The rupture had extended through all the coats of the intestine, and there were several ounces of a sero-sanguinous fluid found in the peritoneal cavity.

—Dr. and Mrs. Hiram Corson, of Plymouth, have celebrated their golden wedding.

MEDICAL SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, November 22, 1883. The president, Dr. Tyson, in the chair.

Large Intestines from Two Cases of Chronic Dysentery, one of them Showing Pseudo-Polypi.

BY J. H. MUSSER, M. D.

Case 1. The patient had chronic dysentery; further clinical information cannot be given. No record of autopsy preserved. The specimen is from the museum of the Presbyterian hospital, and I present it to-night on account of its rarity. It is a part of the large intestine, fourteen inches long. To the naked eye it shows thickening of the mucous and sub-mucous layers, and hypertrophy of the muscular layer. On the surface of the mucous coat innumerable polypoid growths are observed, some pedunculated, some sessile. The sessile growths are from the size of a millet seed to that of a chestnut, round or ovoid. The others also vary in size from a pea to a large bean; their pedicle is generally a one-sixteenth to one-eighth of an inch long. The reporter remembers seeing the specimen when recently removed, and knows there were more pseudo-polypi than are here visible, many having fallen off from handling, etc.; that there was scarcely any healthy mucous membrane; that in this part of the intestine, there was almost complete ulceration of the mucous coat. At one point a large stellate cicatrix, depressed in the centre, is noticeable, while all over the surface cicatricial lines are observed, most distinct about the bases of the growths.

Remarks.—In connection with this specimen I would like to call the attention of the members to a minute description of a similar specimen by Dr. Woodward. His article may be found in the *American Journal of Medical Science* for January 1881, and is entitled pseudo-polypi of the colon; an anomalous result of follicular ulceration. According to the writer, the origin and development of these polypi is as follows: 1. A granulating ulcerated surface of the intestine. 2. Numerous islets of mucous membrane on this surface. 3. "The formation of cicatricial contraction commenced in the infiltrated sub-mucosa constricting the margins of the islets of mucous membrane, which were further transformed by hyperplastic inflammatory processes, until ultimately they acquired the form of pedunculated excrescences, and projected into the lumen of the intestine like so many little polypi," being pushed out by the contraction of the connective tissue. Although the surface of the mucous membrane appeared to the naked eye healthy, with the microscope it showed it was sub-mucous connective tissue infiltrated with lymphoid elements. As pseudo-polypus was composed of a central portion of connective tissue, and a peripheral portion of diseased mucous membrane, the former continuous with the sub-mucous layer, the latter limited to the surface of the growth. The histological changes in the mucous and sub-mucous layers resembled those of chronic inflammation. The remainder of the bowel showed follicular ulceration. I am unable to say

what the condition of other parts of the bowel in the specimen exhibited was.

Case 2. For this specimen I am indebted to Dr. Gittings, of West Phila., for whom I made the autopsy. It was removed from a well-known druggist of this city, who had been a sufferer from chronic dysentery for some time. The bowel affection was especially severe during the past summer. He had been ill of an acute exacerbation for about a week when Dr. Gittings was asked to see him. The symptoms were of an acute dysentery, but not alarming. The effect of the habit of using chloroform, chloral and alcoholics to excess, which habit he continued during his illness, complicated the clinical features. About the tenth day of his illness the typhoid state suddenly developed and he died in coma two days thereafter. His temperature never was higher than 102°, tormina and tenesmus was marked, bloody and mucous discharges were excessive.

Autopsy 18 hours after death. Rigor mortis marked. Body well nourished. On section the abdominal walls were loaded with fat, and large deposits of this tissues were found in the great and lesser omentum, the meso-colon and the epiploic. The mesenteric and lumbar lymphatic glands were not enlarged. The cecum was surrounded by the lymph, the appendix bound down by adhesions and thickened. The colon was dilated, the transverse and descending colon contracted; the walls of the entire colon were thickened. On opening the large intestine it was found to be extensively ulcerated. The mucous membrane and the ulcers were strikingly anæmic and of a pale cream color; there were no points of hemorrhage. The walls were thickened; the mucous membrane swollen; the ulcers were more numerous and larger in size at the cecum. The smaller ulcers were the size of a dime; some of the larger extended around the gut, and were one-half inch to an inch wide. The edges of the ulcers were regular, beveled and thickened, the floor rather clean; the deepest did not extend beyond the muscular coat, the more superficial only included the mucous membrane. The larger ulcers were on the top of the folds of the intestines. A tenacious thick mucus covered alike the ulcers and the adjacent structures.

Condition of other organs.—Liver enlarged and fatty. Kidney markedly cirrhotic. Spleen normal. Heart slightly hypertrophied. Microscopical examination revealed the changes in the intestine of chronic inflammation, and that the ulceration was of a simple nature and not due to tubercle.

A Case of Carcinomatous Sarcoma of the Left Testicle.

Presented by Dr. W. G. MacConnell.

This specimen was removed from a young man by Prof. Brinton, at the surgical clinic of the Jefferson Medical College Hospital, on Wednesday, November 7, 1883.

History.—Jacob A., æt. 26 years, a clerk; about eighteen months ago, struck his testicle, in mounting his horse, on the pommel of the saddle, from the pain of which he fainted. No inflammatory enlargement, however, of the organ ensued. Last May he noticed that the left testicle had begun to enlarge, which continuously in

creased in size until it had attained the present volume. There was a sense of heaviness in the tumor, but no pain was experienced until about two weeks prior to its removal, when he noticed a periodical pain of a burning nature, which, with the increasing size of the organ, caused him to apply for relief. It weighs about 8 ounces, and measures in its long diameter $4\frac{1}{2}$ inches, transversely $3\frac{1}{4}$ inches, and about $2\frac{1}{4}$ inches in thickness. No lymphatic involvement was present, nor was the cord involved; the veins of the scrotum were enlarged and prominent. The tunica vaginalis testis is slightly thickened, and very opaque. The tunica albuginea is also thickened, and a slight remnant of the epididymis exists in the form of a small-fibrous lump. Its shape is somewhat that of a kidney, and upon section showed a moderately firm, buffy-colored tissue. It did not cry under the knife. In color and consistence it resembled the soft fibromata; distinct remains of the fibrous septa are to be seen; there are no cystic changes or any chondroid tissue present. Its microscopical appearance and consistence suggested a spindle-celled sarcoma, and as such, upon section, I diagnosed it. Microscopically, at a first examination, from the great ecstasis of the epithelium present, I was inclined to regard it as a pure medullary carcinoma; but after a careful study of several sections, I am inclined by reason of the juvenescence of the connective tissue, both round and spindle cells being present, to call it a sarcomatous sarcoma. There was no history of syphilis, scrofula, or tubercle, nor had any member of his family ever labored under any form of tumor.

Dr. Nancrede called attention to the fact that modern microscopic study has shown that carcinoma of the testicle is a rare disease, most malignant tumors of that organ being really sarcomata. In this connection it is of much practical interest to note that the system becomes infected at a relatively late period of the disease, so that when a sarcomatous testicle is removed at an early stage of the disease, prolonged immunity, if not actual cure, resulted. The inguinal and retro-peritoneal glands were those usually affected, their enlargement, by pressure, pain, etc., being the ultimate cause of death. Even more distant lymphatic glands are in rare cases involved.

Dr. Formad agreed with Dr. Nancrede. Some years back he had paid special attention to the study of malignant growths of the testicle and ovary. Of the former, he had examined thirty cases, all of which were sarcomata. He did not believe in the existence of such a growth as true carcinoma of either the testicle, ovary, or kidney. The so-called carcinoma of those organs exhibit cells of a *connective-tissue type* rather than of an epithelial. Dr. Formad considered, with many other observers, that the so-called epithelial cells of kidney, testicle, and ovary are really *endothelial*, and gave reasons in support of this view. He further said that there is a variety of endothelial carcinoma occurring in the breast which is that usually described as alveolar sarcoma. Here the endothelial cells of the lymph-spaces proliferate, but the glandular elements of the mamma do not participate. It is doubtless from the examination of such tumors that Virchow, and Cornil, and Ranvier, have gained the erroneous idea that true

carcinoma takes its origin from connective tissue. The speaker would suggest the term "*endothelial carcinoma*" for such tumors instead of "alveolar sarcoma."

Dr. Davis could not think that Dr. Formad was correct in absolutely denying the existence of carcinoma of the testicle, ovary, and kidney.

Dr. MacConnell agreed with Dr. Nancrede as to the relative frequency of sarcoma of the testis, having examined a large number of such specimens. He could support the views of Dr. Formad as to the growths of the testicle originating largely in proliferation of the endothelia of the lymph-spaces and tracts.

Sarcoma of the Breast.

Presented by Dr. G. E. De Schweinitz.

Some weeks ago I had the pleasure, through the kindness of Dr. Ashhurst, of exhibiting a specimen of cysto-sarcoma of the female breast, and to-night I am once more indebted to him for the privilege of showing this tumor, also a cysto-sarcoma, but differing in type from the previous growth. It is another instance of the truth of the remark, so justly made by Rindfleisch, that "the expression cysto-sarcoma is by no means to be conceived as the designation of a definite, perhaps round-celled, sarcoma with cysts, but it only tells us that a new formation with the textural character of histioid tumors has attacked the mamma and dilated its preformed cavities. This growth was removed from the person of a lady of middle age, married, but childless. She assigns no cause for its appearance. The growth of the tumor has been slow, it having originally been noticed six years prior to the date of operation. The weight of the mass immediately after removal was three pounds and one ounce. On palpation there was a distinct sense of fluctuation; the skin over the tumor was discolored, but not adherent. On section the growth is seen to be composed of two parts, the one about the size of a closed fist, and the other somewhat smaller. The section evacuated a quantity of bloody, mucous-like fluid. The centre of each mass is seen to be cystic, or rather the masses are the papillary and irregular excrescences which have protruded into the dilated ducts. The growth is composed of numbers of variously-shaped nodules, whitish or yellowish white in color, but in some spots semi-translucent, and resembling somewhat colloid material. The microscopic examination of various portions shows a similar result, differing only in degree—large round-celled sarcoma tissue, and some spindle cells, generally diffuse, but in places tending to alveolar arrangement; here and there round, stellate and spindle cells branched and anastomosing (mucoid tissue); numerous blood-vessels, usually wall-less, or mere channels passing through the tissue. In many places the sections show the enlarged ducts, cut transversely, and lined with a single layer of columnar epithelium. Surrounding them is a dense matrix of connective tissue. It may not be uninteresting to state that the specimen has been preserved in a solution of hydrate of chloral (gr. xx., f $\frac{3}{4}$ j.), after the manner originally recommended by Dr. W. W. Keen, with what success the beautifully fresh and natural appearance of the growth plainly attests.

C. B. NANCREDE, Recorder.

EDITORIAL DEPARTMENT.

PERISCOPE.

Congenital Encephalitis.

The *Med. Times and Gaz.*, November 17, 1883, says:

An address on the subject of Congenital Encephalitis was delivered before a recent meeting of the Berliner Medicinische Gesellschaft by Prof. Rudolf Virchow, in which, recalling certain observations made by himself in the year 1865, he undertook to prove the inflammatory nature of certain changes in the brains of newly-born children, which some subsequent observers have regarded as physiological, and not abnormal. These changes, as he first observed them, consisted in the appearance of very numerous granular cells and granular globules, scattered chiefly in the white substance of the cerebral hemispheres. For the most part in very regular order throughout the whole area, while there was absolutely no change in the appearance of the grey matter. These observations were published eighteen-years ago, and it was then suggested that the changes were inflammatory; they have been again and again observed by other pathologists, and their frequent occurrence has led to the opinion that they are normally produced in the development of the brain. The extent to which such changes are congenital, however, cannot be proved in every case. In the brain of a child born dead, no doubt can exist; but in the case of a child which may have lived only a few hours, doubts may very reasonably be entertained. With each day of life it becomes more and more uncertain how far the appearances may be regarded as congenital.

The elements thus found in the brain are quite unmistakable granular cells and granular globules. As long ago as 1846, Prof. Virchow drew out a classification of the various modes in which fatty changes may occur in cells. Three different forms were distinguished, and they have not since been added to. In the first the fat within the cell belongs properly to the character of the tissue of which it forms a part; in the second the appearance of fat-granules is always the forerunner of disintegration of the cell in which it appears; in the third the appearance of the fat is only transitory. From the form of fatty change alone, however, it cannot be determined whether the change is to be classed as physiological or pathological: other considerations must determine that point.

To which of these three classes of fatty change must the appearance in the newly-born brain be attributed? To assume the first would be to allow the possibility of the occurrence of normal fatty tissue in the brain. Putting this aside, we must look either to the possibility of transitory absorption of fatty matter, or to a process of fatty degeneration. As against the former must be placed the truly fatty nature of the change—the absorbed particles are not myelin—and the absence of any disintegrating points in the affected

brains from which granular material could be taken up.

"I am convinced," says Prof. Virchow, "that this condition is a fatty metamorphosis in the strictest sense of the word, and for this reason: because all the transition stages, from the intact cell to the granular, from the granular to the globular, and at length to the simple masses of fat, are here present, just as we recognize them when occurring in the fatty metamorphosis of other organs. Besides the diffuse form, however, of which I have spoken, there is a second form appearing in a more or less nodular manner."

The latter is easily to be seen with the naked eye. "One notices in the midst of the white matter dull spots, which become more and more opaque, and after a time take on a faint yellowish-white appearance, and finally commence to soften at individual points, and to become true centres of disintegration. These centres are distinguished by a peculiar change of the axis-cylinder which they present, in addition to the excessive formation of granular cells and globules, which consists in a varicose swelling and subsequent falling apart of the divisions thus formed, so that one can demonstrate long, varicose, often spindle-shaped bodies between the fatty particles. If one now compares a sufficient number of these two categories of cases, the diffuse and the circumscribed, it becomes apparent that there is by no means an essential difference between them, but that the circumscribed form represents an exaggerated condition of the same process which is found diffused.

In order to determine the relative frequency of the occurrence of these changes—the one point upon which the theory of their physiological nature has been based—Prof. Virchow has lately instituted a series of investigations of the brains of still-born and newly-born children, extending to 44 cases in all. Of these 22 were born dead, 5 died during birth, 17 lived for various periods up to five weeks; but of these most died during the first day. Twenty-seven were congenital in the strictest sense, and of these only 11 showed the appearances described, abundantly in 8 cases, and sparingly in 3. Of 9 immature embryos examined, only 3 failed to show the changes; of those born dead at full term, 9 showed no changes, and in only 3 were they present. From these purely objective investigations, it follows that the appearances in the brain do not occur with such constancy as to warrant the belief that they can be of normal origin. Turning, now, to the examination of those cases in which death took place at varying periods after birth, only 3 cases out of 17 were found to be free from the condition. These three cases with normal brains were each distinguished by all the signs of inherent weakness; whilst at least eight of those with affected brains showed no predominant symptoms of feebleness whatever. From a careful consideration of all the cases, it appears clear that there is no ground for the supposition that this change in

the brain is but a part of a general disturbance of nutrition.

"I should certainly be the last to deny that such a fatty metamorphosis *may* be the result of a bad state of nutrition; and if such a connection could be established I should have nothing to urge against it in this case; but, nevertheless, I must always consider that it would be a disastrous state of affairs if general atrophy or want of proper nutrition were always to lead to this condition of brain. In all those cases in which, as far as I am aware, fat occurs as a consequence of bad conditions of nutrition, it appears to be universally attracted to the walls of the vessels, in which at any period of age, as a result of impaired nutrition, such changes may occur in a very marked manner even to the smallest capillaries." The granular cells previously described, however, could be clearly demonstrated to have no connection with vessels.

A challenge is thrown down to any workers in the same field of investigation to prove the association of these fatty metamorphoses with general conditions of impaired nutrition. Regarding these changes as indicative of encephalitis due to a condition of irritation, Prof. Virchow directs attention to an analogous change which is recognized in the tissues of the optic nerve in retinitis, in which granular globules appear in the interstitial tissue, and in which a varicose and gangliform alteration of the nerve-fibres is induced. Although the process in the brain cannot be said to be an inflammation in the strictest sense of the word, it is, nevertheless, an irritative process—*i. e.*, a process in which the fatty metamorphosis is not immediately apparent, but in which a definite series of irritative changes lead to that result.

The Administration of Salicylic Acid.

In *Squibb's Ephemeris* for November, we find the following:

The apyretic effect of salicylic acid is one of the most remarkable and important therapeutic discoveries of the age, and its control over all such conditions as are generally met with in acute and subacute rheumatism is almost complete. Its applications, therefore, in medicine are very numerous and very important.

In its internal use the points most necessary to be borne in mind are the disturbing effects of very large doses, and the rapidity with which it is eliminated. It should, therefore, be given in full doses at first until the impression is made, and then in moderate or small doses frequently repeated.

It is best given in wafers or cachets, and it should not be packed into capsules. Two or three doses of fifteen to twenty grains with two or three hours' intervals will usually produce its characteristic beneficial effects. Then ten grains every two hours, with intervals gradually increasing to three and four hours, serves to keep up the effects with the smallest risk of such disturbance as will require it to be suspended when most needed.

Of late it has been more rarely used, the salicylate of sodium having taken its place with the same effect, and with some advantages.

It is a curious and very interesting and important circumstance, that full doses of salicylic acid

or salicylates do not interfere with the digestive functions of the stomach, and yet a very small quantity will prevent the action of pepsin. At least this statement is made on what appears to be good authority.

An ordinary cold saturated solution contains somewhere about one part in three hundred; and such a solution is very convenient indeed, as a vehicle for solutions of alkaloids for hypodermic use. If a drachm of the acid be added to a pint of water, and the mixture be well shaken, such a solution, with some undissolved acid at the bottom of the bottle, will be the result. Then if this be used entire, or diluted with an equal volume of water, for making hypodermic solutions, such solutions will remain free from growths of all kinds for an indefinite length of time, and will not be more irritant than if made from water alone.

Absorption of Fat in Adults and Children in Fever and Apyrexia.

The *London Med. Record*, December 15, 1883, says:

Following a suggestion by Professor V. A. Manassein, Dr. V. E. Tchernoff (*St. Petersburg Inaugural Dissertation*, 1883,) investigated the assimilation of fat by adult subjects and children suffering from febrile diseases. The observations were conducted on twenty-two patients, nineteen of them being between 7 and 42 years of age, the remaining three under a year. Seven of the patients suffered from enteric fever, two from recurrent fever, four from typhus, two from erysipelas, one from malarial fever, two from croupous pneumonia, and one from varioloid. Of the infants, one had fever from vaccination, one suffered from scarlatina, and one from catarrhal pneumonia. The patients (those between 7 and 42 years of age) received milk, in which the proportion of fat had been previously ascertained, and bread; their feces, made from the beginning of an experiment, were collected and analyzed. The author sums up his results as follows:

1. A healthy subject assimilates about 90 to 94 or 95 per cent. of fat of the food given, provided it be present in a form suitable for the action of bile and pancreatic juice.

2. A subject suffering from a febrile disease, as a rule, assimilates lesser quantities of fat than the same subject in a healthy state, the difference being on an average 7.2 per cent.

3. The single deviation from this rule is given in enteric fever. When suffering from the latter, the patient absorbs more of fat than when he is convalescent, or quite well. This is especially true in regard to severe forms of typhoid.

According to the author, the fact of fat being better assimilated by typhoid patients finds its explanation in the presence of great numbers of leucocytes in the intestines in cases of enteric fever. As a recent work of Professor F. N. Zawaykin shows, leucocytes are "true absorbers and distributors of fat."

4. The quantity of absorbed fat, and the percentage proportion of fat in feces, are influenced by the quantity of fat in the food daily taken, by the individuality of the patient examined, by his general state at the time of examination, and,

possibly, by the admixture of carbohydrates and albuminoid matters.

5. There exists no difference between adults and children in regard to all the propositions stated above.

6. Febrile patients, though their faculty of the absorption of fat is diminished, still assimilate fat in considerable quantities (from 80 to 90 per cent.). Therefore, any fears entertained against the administration of fat to febrile patients are groundless. Any avoidance of fat in febrile diet would be unjustified: fat is as necessary for the diseased as it is for the healthy.

The Exact Value of the Electrolytic Method.

When any suggested remedy has not equalled its promises it is well that prominence should be given to the fact, that too much confidence may not be reposed in it. In the *New England Medical Monthly*, December, 1883, Dr. A. D. Rockwell says that electro-surgery, and especially electrolysis, has not equalled the brilliancy of its promise, and he thus concludes his article:

Without occupying time by the recital of illustrative cases, I would offer the following summary as indicating as nearly as possible, the exact value of the electrolytic method in surgical diseases:

1. The success to be met with in the treatment of malignant growths in general is but trifling. The size is sometimes reduced, and the pain is almost always greatly alleviated. In the class of cases, however, termed epithelioma, when the disease does not extensively involve the subjacent tissues, and where it is easily reached, it is probable that in the majority of cases the very best results will follow thorough and persistent treatment.

2. Fibroids being dense and comparatively dry, do not readily shrink under electrolysis, and it is seldom that we can accomplish more than some slight diminution in bulk. The results following this limited influence, however, are especially valuable in the case of uterine fibroids of an intramural character where the knife cannot be used. The pressure upon the bladder and rectum is in these cases greatly lessened, or entirely dissipated, and the relief that follows is immense.

3. It is in erectile and small cystic tumors that electrolysis is most effective. In these conditions it is indeed a specific. The cure that follows is complete, and with proper care scars can be avoided.

4. The ordinary form of goitre acts somewhat capriciously under electrolytic treatment. Goitres that are small and soft may not only be treated effectually by the introduction of needles, but external applications alone will sometimes cause them to entirely disappear. Even when they are quite large, if their density is not too great, a perfect cure may follow. Where they do not entirely disappear, they may almost invariably be reduced in size, affording in many cases marked relief from the pressure that is so distressing.

5. By this method hairs may be permanently removed. The negative pole and a weak current are to be used.

6. In many cases of urethral stricture permanent relief is afforded. A more extended experience, however, is necessary to establish its exact value.

Sudden Death Due to Hemorrhage from Hepatic Vein.

Dr. Alfred F. Holt reports a case in the *Boston Med. and Surg. Jour.*, December 20, 1883, which was verified by autopsy. The case he describes as follows:

J. C., an Englishman, fifty-six years of age, large and strongly built, though slightly hunch-backed, died May 15, 1883. For the last six or seven years of his life he had been engaged in a small kindling-wood trade, doing some of the manual labor required by such a business himself. For the ten years before this time he had been a police officer.

Ten or twelve years before his death he began to have severe attacks of colic. These continued to occur at irregular intervals during his life, and for the last six or seven years he was never quite well, although able most of the time to attend to his business. During these years he had consulted a large number of physicians. Most of these pronounced his trouble gall-stones, but some of them dyspepsia, and still others some obscure disease of the liver.

Seven days before his death, while in Boston attending to some business, he was suddenly prostrated with a very severe attack of pain in the region of the stomach, nausea, and faintness. He was taken to his home in Cambridge in a carriage, and his physician, Dr. Dow, was immediately summoned, who found him suffering from severe pain, vomiting at short intervals, pale, and faint. The pain and faintness continued until evening, he having been taken sick about noon, when the doctor was hastily called again. He found him vomiting blood in the form of very large dark clots. This continued at short intervals for about one hour, when it ceased. A little over three pints of blood was vomited at this time. The pain and faintness continued for three days. Although these symptoms were somewhat relieved by stimulants and opiates, at the end of this time he was again attacked with the vomiting of blood, as before, in the form of very large black clots. This continued at short intervals until nearly two quarts had been ejected, when it suddenly ceased; and after this he was very weak, faint, and nearly pulseless. The pain continued a few hours after this vomiting, when it ceased. Although his mind was clear, he did not rally, but gradually sank, and died forty-eight hours later, or a little less than seven days from the commencement of the sickness. No blood was at any time passed by the rectum.

High Amputations for Senile Gangrene.

Before the Royal Med. and Chirurg. Society (*Med. Times and Gaz.*, December 15, 1883), Mr. Hutchinson read a paper on the above subject, which began by the statement that the author's chief object was to urge the safety and expediency of amputating in senile gangrene if the operation were done at a good distance from the disease. In the common form of gangrene of the toes and foot, the lower third of the thigh was the part suggested, and in rare cases in which the hand is affected, the middle of the upper arm. After remarking on the fact that amputations had hitherto generally proved disappointing, owing to

return of the disease, the author urged that this was from their usually having been done too low down. The calcification of the arteries, upon which in the main the disease depended, was usually greatest near the periphery, and hence the difficulty as to supply of blood for the nutrition of the flaps. This source of danger was not encountered if the amputation were done sufficiently high. In a series of cases in very old patients, the author had not encountered the recurrence of gangrene excepting in one. In three the stump had healed well. In a fourth, in which the patient, although not old, was prematurely senile, and the calcification of the arteries extreme, the recovery had also been excellent. In this instance the femoral artery was so rigid that it stuck out from the face of the stump like a small bone. One of the patients in whom the stump had healed without a drawback was seventy years old. In two of the cases the other foot had subsequently been threatened with gangrene. As to the time to be selected, the author thought that as soon as the patient was so ill as to be confined to bed, and the disease well established, it was better to do the operation. Spontaneous cure was, he urged, very exceptional, and a great majority of such cases ended in death after a long period of much suffering. The thinner the patient the less was the probable risk of the amputation. In a few cases in which the thigh was exceptionally fat and the tissue flabby, it might be wise to hesitate as to recommending it. In all his cases Lister's precautions had been carefully used, and in two or three the patient had never experienced the slightest pain from the day of the operation.

The Treatment of Pelvic Cellulitis following Parturition.

Dr. W. M. Graily Hewitt thus concludes an article in the *Med. Press*, November 21, 1883:

A few words with respect to the treatment: A remarkable feature in these cases is their tendency to chronicity. They are always tedious and difficult to cure, and the cure depends more on attention to diet than on any other element of the treatment. Rest, of course, is an essential; but the nutrition requires careful consideration. With regard to the subject of food: Deficiency of food may predispose to cellulitis in a patient in whom other factors in its cause may be present; or it may render an already-existing case of cellulitis less amenable to treatment. In the case before us the quantity of food taken was perhaps only one-third of the total amount required by the healthy subject. This created a weakness which showed itself in various ways. Under these circumstances there is great indisposition to take food, and if only three stated meals a day are provided, a very small amount is taken; the patient becomes exhausted in the intervals, and when meal-time comes is not able to take nourishment. Hence the quantity taken is not enough to induce activity in the nutrition process, but only enough to keep up a condition of *statu quo*. To stimulate nutrition, articles capable of ready assimilation must be selected—Brand's essence, beef tea, milk, etc., with a fair amount of stimulant in the shape of brandy, and this must be given very frequently, every hour or so. Under this treatment

the appetite will rapidly improve, and in a week or so, in all probability, solid food will be taken with zest.

As subsidiary treatment, poultices may be applied to the abdomen to relieve pain and assist resolution, and if the latter is very severe a little opium is indicated. The bowels should be daily opened by the administration of a mild laxative. Some medicine, in the shape of dilute nitro-muriatic acid with a little tincture of orange, is often useful as a stomachic and tonic; and later on iron and quinine may be given with advantage.

Trichlorphenol in Syphilographic Practice.

The *London Med. Record*, December 15, 1883, says: The excellent results which had been obtained by Dr. Rubetz from the use of trichlorphenol in phagedænic chancres (see the *London Medical Record*, April, 1883, p. 132), induced Dr. S. P. Tomashevsky, of Prof. V. M. Tarnovsky's clinic, St. Petersburg (*Vratch*, 1883, Nos. 18, 19, 21, and 22), to try the remedy in nine cases of soft chancres of the glans and prepuce, in seven of ulcerated chancreous buboes, and in several cases of primary syphilitic ulcers, deep syphilitic ethymata, and gummy ulcers of the skin and subcutaneous cellular tissue. He used from one to two and a-half per cent. solution of trichlorphenol (R trichlorphenoli 3j to 3ij ss., spiritus vini q.s. ad solut., glycerini puri lb. j), which was applied to the diseased surface three times daily. Dr. Tomashevsky's results strongly differed from those of Dr. Rubetz; in fact, they were so unsatisfactory as to have compelled the author to give up any further trial of treatment by trichlorphenol. In eleven of fifteen cases of soft chancres and buboes, even two or four weeks' application of the lotion did not check the ulcerative process; the ulcers finally rapidly healed under iodoform. Of the remaining five cases, one (which, possibly, represented only an instance of ulcerated herpes progenitalis) was cured in eleven days; in other four cases the cure followed in nineteen days. In almost all the cases, the use of trichlorphenol produced inflammation of the periphery of ulcers, which induced him to lessen the strength of the solution. As artificial or accidental inoculations showed, the discharge of chancreous ulcers dressed with trichlorphenol did not lose its virulence during a considerable period after the commencement of the application. Of the syphilitic cases, only one—that of an obstinate deep ethyma of the leg—was successful, the ulcer rapidly healing under a two per cent. solution of the drug. In the remaining syphilitic patients, trichlorphenol displayed too strong irritating local action to permit any prolonged experimentation.

Tuberculosis in Childhood.

The *London Med. Record*, December 15, 1883, says an interesting discussion on this subject occupied one of the sittings of the Congress of German Physicians and Naturalists held recently at Freiburg (*Wiener Allgem. Med. Zeitung*, Nos. 39-40, 1883.) The relative frequency of the disease in new-born children, its development in early childhood, and the dangers of infection to which children become exposed, were each in

turn considered. Prof. Demme, of Berne, gave as the result of his investigations the following facts with respect to the locality of the attack in congenital tubercular disease—viscera, 71.8 per cent.; joints and bones, 69.6; peripheral lymph glands, 65.4. The disposition to the development of tubercle is much increased after attacks of measles or prolonged whooping-cough. While maintaining that the inhalation of tubercular poison is more to be feared than its ingestion, he showed by his own and foreign observations the relative frequency of tubercular poisoning by un-boiled milk, derived from animals affected with bovine tuberculosis. Professor Rauchfuss, of St. Petersburg, contributed a valuable summary from the pathological records of the Foundling Hospital in St. Petersburg, to show the relative frequency with which individual organs become attacked. His figures show that the lungs and bronchial glands are affected in nine-tenths of the cases; the liver, spleen, intestines, kidneys, pia mater, pericardium, and peritoneum follow in that order. A similar summary, derived from the large Foundling Hospital in Moscow, and arranged by Professor Klein, differs in small points only. The lungs and bronchial glands again head the list, which gives the liver, spleen, kidneys, choroid, intestine, pia mater, as next in order of frequency.

Fractures of the Patella.

Dr. William MacEwen contributes a paper on this subject to the *Lancet*, November 17, 1883, from which we take the following:

1. The chief cause of non-osseous union of the patella in cases of transverse fractures is the interposition of fibrous and aponeurotic structures between the fractured surfaces. 2. If osseous union be desired in transverse fractures of the patella, it is requisite, in the first instance, to elevate all the tissues which lie over the fractured surfaces, and which prevent them from coming into intimate contact. 3. From the ease with which the two fragments, in many instances, may be maintained in position, it is probable that osseous union could be obtained without suturing, provided these soft tissues were first elevated. Practically, however, suturing the patella ought to be adopted, as it is the easiest and surest way of securing accurate apposition, and adds no risk to the operation. The operation of elevating the soft structures between the fragments and of suturing the bone ought to be undertaken within the first forty-eight hours from the time of injury. 5. In order to lengthen a muscle, a series of V-shaped incisions made into its substance in a transverse row will effect the purpose, while not diminishing its strength as transverse incisions do.

Sulphate of Soda in Carbolic Acid Poisoning.

Dr. John Reid reports this case in the *Brit. Med. Jour.*, November 17, 1883:

Mrs. W., aged 35, drank, with suicidal intention, somewhat less than four fluid ounces of crude carbolic acid. When seen half an hour afterwards, she was comatose, the pupils were contracted, and cornea-reflex was absent; the pulse at the wrist could with difficulty be felt; the first

sound of the heart was almost inaudible; whitening of the lips and mouth were not present, yet the breath smelt of carbolic acid. The pump was not used; but about an hour after taking the poison, four drachms of sulphate of soda dissolved in five ounces of water were injected into the stomach through a catheter; two hours later, three-quarters of an ounce of the salt in five ounces of water. After each injection, the patient appeared to be somewhat relieved in breathing; four hours after this, or about seven after taking the poison, cornea-reflex had returned, the patient groaned somewhat, and the pulse had slightly improved. Three-quarters of an ounce of sulphate of soda in five ounces of water was now injected, after which the patient appeared to be easier. She died in about forty minutes.

Ether was injected at the end of the first, third, and fifth hours, and probably the result would have been different had an injection been given at 2 p. m., after which I had to leave somewhat suddenly. The patient had been ailing for some time. Sulphate of soda has succeeded in the case of animals, and if this drug has not been used in man, the case may be of interest.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—We have received the report of the ninth annual meeting of the American Neurological Association, held in New York last June. It contains some interesting papers that will prove valuable reading to the general practitioner as well as the specialist.

—The Introductory Address to the Medical Class at Dartmouth College, by Dr. Louis Elsberg, has in it a good deal of fresh thought, and some quaint original talk about the relations of health and disease.

—Of interest to those pursuing sanitary studies is the little pamphlet, entitled "The Geology and Topography of Iowa in a sanitary point of view." It was prepared by Dr. P. J. Farnsworth for the Iowa State Board of Health.

BOOK NOTICES.

The Dissector's Manual. By W. Bruce Clarke, M. A., etc., and Charles B. Lockwood, F. R. C. S. H. C. Lea's Son & Co. 12mo., pp. 391.

This is another of the English manuals for students, a series which we have taken occasion previously to note as one of the most satisfactory which we have yet met with. The present number has a moderate show of engravings, and the descriptions are full enough for the purpose in view. It will be found a useful little volume.

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PUERPERAL FEVER.

The difference between the practice of the ordinary physician and of the fashionable specialist was never more perfectly illustrated than by a comparison of the *usual* treatment of puerperal fever or puerperal septicæmia and that recommended by Dr. T. Gaillard Thomas in his admirable address published in the *N. Y. Med. Jour.*, December 15. Dr. Thomas is a man of immense experience, and his views are invaluable; every word he utters is a pearl of wisdom, and is pregnant with great good; but a careful and thorough carrying out of his minute directions would be simply an impossibility to any one not abundantly blessed with wealth. Still, since half a loaf is better than none, we will give an editorial summary of his views, so that they can be carried out as far as possible.

In the first place Dr. Thomas regards what we are wont to call puerperal fever, as a septicæmia, produced by the entrance of septic germs into the system, through the lacerations of vulva, vagina or cervix caused by the passage of the child at the time of parturition, or through the open sinuses at the point of detachment of the placenta. Therefore his whole principle of treatment is really directed towards combatting this septic state.

He enunciates a series of prophylactic measures, which may be summed up in the one word "*disinfection*." Every article in the proposed lying-in room, walls, floor, furniture, should be thoroughly washed with a ten per cent. carbolic acid, or a 1 to 1,000 solution of mercuric bichloride.

The physician, the nurse, every one and everything about the lying-in woman, should be thoroughly disinfected. A potent factor for the introduction of disease germs is the catheter; this should be thoroughly disinfected before use, and Dr. Thomas says: "It is a very common and very bad habit for nurses to own silver catheters, which they carry about with them from case to case of midwifery."

After the completion of labor, the physician should carefully examine the vulva. Should he

find the perineum lacerated, it should be closed at once by suture, to shut up this avenue to septic absorption, and, should slight solutions of continuity be found in the labia or the vulvar extremity of the vagina, these should be dried by pressure of a linen cloth, touched with equal parts of sol. ferri persulph. and carbolic acid, again dried thoroughly by pressure with the cloth, and then painted over with gutta-percha collodion. If this be thoroughly done, absorption will be prevented at these points for at least three or four days, when the application may be repeated.

"In six or eight hours after the labor, when the patient has rested, the vagina should be syringed out with an antiseptic solution, and a suppository of cocoa butter, containing from three to five grains of iodoform, should be placed within it, under the os uteri. A syringe with intermittent jet should be used, which will wash away with gentle force all blood-clots, and reliance should not be placed upon the feeble drip of the fountain syringe, the advantages of which are, I think, entirely theoretical.

"These vaginal injections and suppositories should, in cases of normal labor, be repeated every eight hours; in cases of difficult or instrumental labors, twice as often; and they should be kept up for at least ten days, the nurse observing to the last the precaution already mentioned of washing her hands before every approach to the genital tract of the patient."

The principles for treatment are very similar to those for prevention. He would rely, principally, upon antiseptic injections.

"The physician must now decide whether, in his opinion, the septic disease which is developing has originated in the wounds situated between the os internum uteri and the vulva, or in the endometrium, above the former point. If he decide in favor of the former view, he should persist, for a time longer, in the more thorough use of vaginal injections; if of the latter, intra-uterine injections should be at once resorted to. Usually the question has to be decided by the efficacy or ineffacy of frequent germicide vaginal injections in bringing down the temperature and controlling other grave symptoms. Should a failure of these seem to prove that the origin of the disease is higher up the genital tract, more decided and radical measures must be taken."

"That the use of antiseptic uterine injections

after parturition is attended by danger, is beyond question. The greatest hazard attending this plan is the entrance of air into the uterine cavity; the next, the production of hemorrhage by detaching some of the thrombi which fill the mouths of the uterine sinuses; the third, the danger of forcing the fluid used as an antiseptic directly into the general circulation, through the introduction of the tube into the mouth of a sinus; the fourth, the creation of convulsions, violent pain, or nervous prostration, by a sudden and baneful influence upon the nervous system; and the fifth, the passage of the tube into a Fallopian canal, and the injection of fluid directly into the peritoneal cavity, as in a case reported by Dr. W. Gill Wylie in an interesting paper in the *New York Medical Journal* for June 23, 1883, p. 679.

"All these dangers may be, to a great extent, avoided by care as to details: by using a large injecting tube which cannot enter an open-mouthed sinus; by using water warmed to 105°; by injecting the fluid through the tube so as to exclude air, before passing this up to the os uteri; by using only a moderate degree of force in throwing the jet against the uterine walls; and by proceeding with the whole affair gently, cautiously, slowly, and intelligently.

"The tube should never be allowed to fill the os uteri completely, so as to prevent the escape of the injected fluid. Should the cervical canal be so narrow as to hug the tube closely, it should be dilated by dilators of hard rubber, by the fingers, or by Barnes's bags, before the injection is practiced.

"A solution of the persulphate of iron should always be at hand in case of sudden hemorrhage from displacement of a thrombus. Should this accident occur, ergot should be immediately given hypodermically, the iron solution be at once added to the antiseptic solution and allowed to pass into the uterus, and pressure be made upon the fundus so as to stimulate the contraction of uterine fibre to accomplish closure of the open sinuses in that way."

In addition to the injections, Dr. Thomas would use quinine or salicylate of sodium to control the tendency to chill and pyrexia, and would confine the patient to a liquid diet, chiefly milk.

It will be seen that his whole treatment is essentially antiseptic, and that the agency he chiefly relies upon is corrosive sublimate. Dr. Koch, of Berlin, has recently demonstrated that mercuric bichloride possesses antiseptic properties, probably

superior to those of any other article in use, and its merits are now being very extensively tested.

While it would be impossible to strictly carry out Dr. Thomas' suggestions, save in the higher and fashionable walks of life, wherein money is no consideration and every possible requirement can be had, and also while we do not believe that so much trouble is called for in the majority of cases, and particularly among those in rural practice, yet we must commend in the highest terms the antiseptic doctrines inculcated.

Cleanliness, natural and antiseptic, of patient and attendants, are the two cardinal points in the prevention and cure of puerperal fever.

CRANIOTOMY—IS IT NECESSARILY FATAL?

Dr. W. D. Wilkes makes a novel suggestion in the *Med. Times and Gaz.*, November 17, 1883, which may or may not prove practicable, as future experience may demonstrate.

He calls attention to the fact that when the disproportion between the foetal head and the pelvic outlet is so great that natural delivery is impossible, and craniotomy must be resorted to, we are taught to pass the instrument well up to the base of the brain, that all life may be destroyed before delivery, and the mother and friends not shocked by the horrible spectacle of a living child with a mutilated head.

He then propounds the query, whether craniotomy is necessarily fatal either to life or to the subsequent intellectual well-being of the babe. Considering that it may not be, he suggests, that after explaining the situation to the friends, we should proceed to mutilate the head just as little as is absolutely necessary for delivery, and then subsequently treat the case as we would a similar case of head injury occurring under ordinary circumstances.

So great has been the progress of surgery of late years, and such wonderful cases have been reported of absolute recovery after the most grave and seemingly fatal injury to the skull and the brain, that we would not like to condemn this suggestion until it had been actually tried. Still, we cannot look upon it with much hope.

If we were the foetus, and had our way, we would prefer to be killed outright, for we fear the chances of restoration to usefulness would be very slight. A very unfavorable feature would be the almost absolute impossibility of securing rest and quiet, so essential to the successful treatment of head injuries; for it is not in the nature of an infant to keep quiet. It is true that this requisite might be procured artificially.

Again, the danger, we fear, of bringing into the world a human being, destined, on account of brain mutilation, to a life of idiocy, imbecility, or epilepsy, would deter most physicians from resorting to this suggestion.

Still the suggestion is worthy of remembrance, and when some suitable case presents itself, where the disproportion is so slight that but little mutilation would be required, and where *intelligent* friends and relatives, after a full explanation, are willing to assume all responsibility, it might be tried.

NATIONAL OR LOCAL EFFORT?

The direction in which efforts toward public sanitation should be chosen must depend in different governments on their varying political constituency. The plan best adapted for England or Germany will not suit in the United States; that successful in the republic of Switzerland will not be any the surer to prosper with us, because in many ways our domestic relations differ from those of that model little state.

The size of our country and the autonomy of our States are two factors in the problem of the first importance. There is a widespread dislike of control from a central bureau, and this is so true, that any attempt of a central office in Washington to interfere, or direct, or command the action of states or municipalities, will infallibly meet with opposition, and finally with rejection. Whether this is praiseworthy or whether it is not, need in no way come into the question. We speak of the fact as a fact, and it cannot be gainsaid.

The truth about it is well expressed in a passage in the last report of the United States Marine

Hospital Service. In the discussion of the sphere and the limits of national quarantine, Dr. Hamilton writes:

"In conclusion, it is proper to say that under existing law the duty of the government apparently ends with the maritime quarantine, and the question of local municipal sanitation is one which may not only with propriety be left to the States, but all existing law has heretofore done so, and that, however desirable it might be for the government to undertake the work of general sanitation, it is evident that the limits of such a work could not be foreseen at the present time. So intimately is this question connected with the local police and municipal government, that interference by Federal authority is not only unwarranted, but probably mischievous."

For this same reason the American Medical Association can never attain the strength and solidity of the British Association, and it will fail, as it has failed, if it goes out of its proper sphere as a scientific congress to attempt legislation by a central power. In the way of encouragement, unifying and aiding efforts, improving social relations, and stimulating legitimate ambitions, it will always have a fruitful field to cultivate. But when it attempts to act as an authoritative body, or to claim for itself a political power, it will excite opposition and pave the way for its own downfall.

The sentiment of individual, municipal and state independence is too strong in this country to be overcome by any centralized power, professional or political. May it long be so!

DRUG FARMS.

Some time since (see *REPORTER*, Vol. xlvii., p. 467,) we published an editorial on this subject, in which we expressed the opinion that some of our young men might, at least, manage to support themselves while waiting for practice by cultivating medicinal plants.

It affords us pleasure to note, from an article by J. W. Colcord, of Lynn, Mass., in the *Druggists' Circular and Chemical Gazette*, for December, 1883, that efforts are being made to interest the national government in this idea. From it we learn that at the last meeting of the American Pharmaceutical Association a resolution was adopted in-

structing the Committee on Legislation to ask Congress for an appropriation of \$25,000, to be expended in the introduction and cultivation of foreign medicinal plants. It seems to the writer that we have such a variety of climate within our borders that it would not be a difficult matter to find a location suitable for the cultivation of many of our valuable medicinal plants.

He tells us that the cinchona trees of India are now valued at \$5,000,000, and that this is the result of an outlay on the part of the Government of only \$500,000, less than fifteen years ago. He is now cultivating some seed of the *Rheum palmatum* from the Royal Botanical Gardens of St. Petersburg, and he kindly offers to distribute these seeds to any one interested in the matter who will send him a two-cent stamp for return postage.

We say again that this occupation would, if successful, enable some of our worthy but poor young country doctors to keep the wolf from the door while waiting for practice. To all so interested we would recommend a correspondence with Mr. Colcord.

RESPECT THE LAWS.

The public papers told us last week that a number of physicians in Lancaster, Pa., had received notice of suit for failing to comply with the municipal regulations about reporting births and deaths, and that one had been fined for not returning a case of epidemic disease (small-pox).

Such an incident as this should not have happened. Physicians who neglect the punctual and accurate observance of official regulations touching vital statistics and public hygiene—and surely we have few enough of them—are setting a bad example to the public, and acting in a manner not calculated to heighten respect for the profession.

How can we expect legislators to vote for health laws and health boards, when medical men disregard the slight local rules considered necessary for the hygiene of their own neighborhoods? Those assemblymen who are opposed to all such legislation will make this a weapon to use against

it; and thus such neglect not only is a bad example of disrespect to laws, and an injury to a neighborhood, but endangers the physical welfare of the Commonwealth.

The physician cannot be too punctilious in such matters.

NOTES AND COMMENTS.

Occlusion of Both Ureters—Death from Syncope.

A rare case is that reported by Dr. J. Vincent Bell in the *Lancet*, December 15, 1883. The patient, a corpulent but temperate man of 49, had occasionally passed small calculi, which he could trace, by his feelings, in their course along the ureters. Finally suppression of urine took place, and the patient was sure that calculi had become impacted in his ureters. The bladder was empty. Aperients, diaphoretics, and warm baths were ordered. This treatment was continued for two days, when he was found to be sweating, and there was a distinct urinous odor about the breath and skin, but he was almost free from pain. The patient felt that the calculus in the left ureter had nearly reached the bladder. He was hopeful and cheerful. He was sitting up talking business when he complained of feeling faint, was given some brandy, said, "I am going," and died instantly.

Both kidneys were enlarged to about double their normal size, congested and friable. There was a calculus of the size of a peach-stone in the infundibulum of the left kidney, and one about half that size in that of the right kidney; also two or three quite small calculi (scarcely as large as peas) in other parts of the kidneys. About one and a half ounces of urine escaped on section of the left kidney, rather less than one ounce from the right; the ureters were both blocked. On the right side a calculus was impacted about an inch above the bladder, whilst in the left ureter a less firmly impacted calculus had less than half an inch to travel, and seemed as if it might have escaped into the bladder within another day, if only that fatal syncope had been avoided.

The noticeable points in this case seem to be the rare coincidence of blocking of both ureters, the recognition by the patient of his own condition and the cause of it, and the death by fainting on what appeared to be the eve of recovery. The question whether any operative measures

should be adopted presented itself, but the difficulty and danger of trying to relieve the ureters with a collapsed bladder in a patient sliding into uræmia seemed to make the likelihood of a favorable result from such interference smaller than from a more expectant plan; and he thinks that the narrow escape from recovery which he apparently had, justified the decision.

Parasitic Worms.

At a recent meeting of the New Jersey Microscopical Society, Dr. Samuel Lockwood exhibited a full-grown dipterous larva taken from the inner ear of a man at Paterson, N. J. August 30. There was a perforation of the membrana tympani. The man had suffered seven days from its presence. The grub had entered the outer ear, but eluded an attempt to extract it by re-entering the drum. Appearing again in the external ear, it was extracted with forceps, and kept alive for several days. He referred to certain papers read to the society (one in 1880, and a sequel in 1881), in which he described specimens of dipterous larvæ passed by a man in large numbers, and which he determined to be larvæ of *Sarcophaga carnaria* and *Anthomyia canicularis*, which had come of eating tainted cold meat and cold boiled cabbage. Such cases are highly instructive.

Nervous Cough.

We are often called upon to relieve a disagreeable, dry, hacking cough, where we can find no evidence of lung trouble. In the *Med. Times and Gaz.*, Nov. 17, 1883, Dr. J. Mortimer Granville tells us that he considers this cough to be due to irritation of the recurrent laryngeal and pneumogastric nerves. It is important that it should be relieved, because the cardiac and gastric irritation which it produces, will cause such nutritive changes in the bronchial membrane and sub-mucous tissue, as to induce a low inflammatory action and the deposit of tuberculous lymph. To relieve it, he advises blistering over the pneumogastric nerve (along the whole anterior margin of the sterno-cleido-mastoid muscle will be near enough) with glacial acetic acid. This should be repeated every two weeks until the cough is relieved. Each side may be blistered alternately.

Arterio-venous Aneurism.

Dr. T. Pickering Pick reports a case in the *Med. Times and Gaz.*, December 15, 1883, the result of a gun-shot wound of the thigh, by which, most likely, the contiguous surfaces of the artery

and vein were bruised, but not actually cut through; adhesion then took place between these vessels, and subsequently the damaged spot gave way, and a direct communication was established between the two. Ligature of the artery, above and below the site of the aneurism, is so dangerous, that Dr. Pick thinks it is better to envelop the limb from the foot to the groin with a "Martin's elastic bandage," and if the patient can then attend to some light occupation, let well enough alone.

On the other hand, if the dilatation of the veins increases rapidly, so as to entirely incapacitate him from work, and especially if the patient's life is threatened from hemorrhage, he shall take the opinion of his colleagues as to the advisability of tying his artery above and below the point of communication.

A New Theory of the Etiology of Puerperal Eclampsia.

While so much doubt surrounds the causative agency of puerperal convulsions, it is permissible to theorize, hence we note that Dr. Henry Corby offers a new suggestion in the *Lancet*, November 17, 1883. He suggests two factors: First, retention of excrementitious urinary products in the blood, due to the pressure of the uterus on the large abdominal vessels, thus delaying the passage of the blood through the kidneys; and second, the irritation of the disproportionately large fœtus in the uterus, acting just as worms in the intestine. The first is the predisposing, the latter, the exciting cause. The weakest point in this otherwise good theory, is that it hardly seems fair to call the fœtus a *foreign* body, until it has reached its full maturity, when it does, indeed, become a *foreign* body, and is expelled.

Acute Pyæmia following the Passage of a Sound.

It is a well recognized fact that a severe chill will sometimes follow the passage of an instrument into the urethra, but it is not often that we read of a case like that presented to the New York Pathological Society by Dr. G. L. Peabody. The sound was passed for a stricture in the bulbous portion of the urethra, and apparently produced but little injury. It was followed by chill and fever, and in a few days, death. At the autopsy there were well-marked signs of pericarditis, which had been recognized during life, and also acute ulcerating endocarditis, and commencing abscesses of the kidney. The blood-vessels in the neighborhood of the abscesses contained a

greater number of micrococci than had been observed by Dr. Peabody in any other case.

A Cause of Dyspepsia.

We all know, but we do not sufficiently appreciate the fact, that disturbances of the female reproductive organs can and do oftentimes produce dyspeptic symptoms, on account or through the agency of that potent factor, reflex nervous influence, about which we have had so much to say recently. Dr. George Elder calls particular attention to this by some illustrative cases in the *Lancet*, December 15, 1883. It will behoove us to carefully examine these organs, when we have unavailingly used all the usual remedies for the dyspeptic conditions, for thereby we will oftentimes throw a flood of light on some hitherto obscure and intractable cases. Malpositions (chiefly versions and flexions) of the womb, Dr. Elder finds to be the chief underlying causes of these troublesome cases.

A Sequela of Thyroidectomy.

It is but proper to note that Prof. Kocher, who has operated about 150 times for goitre (oftener than any other surgeon), has noticed an after effect, which he terms *cachexia strumii priva*, and which ensues in some cases where the whole thyroid is removed. It seems that reflex action operating on the brain produces an idiotic state, the countenance becomes brutal and they are incapable of executing any employment that demands intelligence. It is but just to state that Dr. Lardy, writing to the *Union Med.*, December 6, 1883, says that the memoir in which Prof. Kocher stated this fact to the Berlin Surgical Congress, was received with open ridicule and that Billroth, who has performed the operation 120 times, entirely denies the accuracy of the statement.

A New Cure for Bunions.

To the New York Pathological Society (*New York Med. Jour.*, December 15, 1883), Dr. L. H. Sayre presented some metatarsal bones which had been removed from either foot for bunion. The patient was a man about forty years of age, in whom the condition of the foot, which had existed for many years, gave rise to much difficulty in walking, and on two occasions had caused supuration. The metatarsal bone was removed by means of a bone forceps through an incision on the dorsum of the foot. The incision was closed with black silk, the wounds united in less than two weeks, and the patient was now able to get about with comfort and had a movable joint.

James & Sayre Report

Excision of the Urethra for Stricture.

Among the various methods recommended for the cure of stricture this one has not yet been much resorted to. In *Deutsch. Med. Woch.*, Dr. Huesner reports a case of stricture of many years' duration in the spongy portion of the urethra. He cut into the urethra from the scrotum, both behind and in front of the stricture and divided the stricture on a sound passed into it from behind. He then excised the strictured portion of urethra, and united the ends over a number 16 catheter (Windler's scale) which was left in for three days. After three months No. 20 could be passed with ease.

Dilute Solution of Corrosive Sublimate.

A very dilute solution of corrosive sublimate, one grain to a pint, has been used successfully in chronic diarrhoea. Latterly a somewhat stronger solution has been tried with good results in gonorrhoea, by Dr. J. McChesney (*Therapeutic Gazette*). He used an injection of one grain to six ounces (too strong, we think). He resorts to these injections, which he gives once every four hours, after the subsidence of the acute stage. He is very confident that properly applied this solution will effect a cure of the gonorrhoea within from eight to ten days after it has been resorted to.

The Renal Circulation.

This has lately been studied by Drs. Cohnheim and Roy. Without going into the minutiae of their elaborate methods it is sufficient to say that the organ was enclosed in a sort of plethysmograph, to which Roy has given the name of oncometer, by means of which variations in volume of the kidney can be registered. With regard to the normal circulation in the kidneys, it was found that both the respiratory and pulse waves were shown in the kidney tracing, as well as the Traube-Hering waves when these occurred.

Mullein Plant in Phthisis.

It will be remembered that about one year ago we noted that Dr. F. J. B. Quinlan had recommended this article. In the *Brit. Med. Jour.* December 8, 1883, the same gentleman reports a case of pre-tubercular phthisis in which the patient gained twelve pounds in weight in one month under the use of mullein. He considers that it possesses all the advantages and none of the drawbacks of cod liver oil.

Resorcin in Fungus Umbilici.

Gatchkoosky reports in *Vruch Vedom*, the case

of an infant two months old, with a bright red, solid, globular, umbilical tumor the size of a bean. It was fixed by a short pedicle to the bottom of the umbilical fossa. It was powdered daily with resorcin. After the first application the new growth became of a dark greyish color, and markedly shrank. Five days later the tumor fell away, and within the next few days the blennorrhæa disappeared, and a normal cicatrization of the navel followed.

Painless Paracentesis.

Since general etherization is sometimes interdicted owing to some heart trouble, etc., and since the ether-spray is disagreeable, owing to the odor of ether, the following, not very new, but practical suggestion of Dr. F. P. Stapes in the *Brit. Med. Jour.*, November 17, 1883, is worthy of note. He applies a mixture of salt and ice for about twenty minutes before the operation. This completely destroys all sensibility in the part.

Gelsemium for After-Pains.

After-pains are sometimes exceedingly rebellious, hence our readers will be pleased to learn that Dr. Holt (*N. Y. Med. Jour.*, December 8, 1883,) has used the fluid extract of gelsemium, in doses of a fraction of a drop, frequently repeated. In the case of a patient in whom opium was not tolerated, and where all other remedies had been tried, the relief from gelsemium was prompt and decided.

A New Method of Tooth Drawing.

A small square of India-rubber, pierced with a central hole, is pushed over the tooth until the upper part of the root is reached. The rubber gradually contracts, pulls on the root, and the tooth is finally enucleated without causing any pain. Four or five days complete the operation, while very slight bleeding and slight swelling of the gum are the only inconveniences. This procedure is recommended by a dentist of Geneva.

Albuminous and Purulent Urine in Children.

It is a good suggestion of Dr. Samuel J. Gees (*Brit. Med. Jour.*, November 17, 1883,) that we should examine the urine of children and infants in all obscure cases of departure from health. This practice is very rarely resorted to, and yet it may serve to unravel many a mystery. It will serve to put us on the track of a latent disease should we find either albumen or pus in the urine.

Pop-Corn Again.

This article was first recommended in the pages of the *MEDICAL AND SURGICAL REPORTER*, for the vomiting of pregnancy. It has been tried and found good by several physicians who have reported their experience, and now Dr. P. S. Root (*Detroit Lancet*, December, 1883,) adds his testimony to its efficacy, not only in pregnancy vomiting, but also all in kinds of nervous vomiting.

Camphor in Mixtures.

From the *Gaz. Hemdom.* we learn that gum arabic, by forming an emulsion with camphor, enables us to prescribe it in a fine state of subdivision. The following formula is recommended:

Camphor,	1 part.
Powdered gum arabic,	2 parts.
Decoction of linseed,	250 "
Yolk of egg,	No. 1.

Injection of Morphia for Strangulated Hernia.

In the *Vratch* Dr. Zolotnitzky reports a case of femoral hernia, strangulated for eighteen hours. All manipulation proving unsuccessful, he injected subcutaneously one-fifth of a grain of acetate of morphia in the neighborhood of the hernia. After one hour the tumor had nearly disappeared and a single touch of the finger completed reduction.

Pilocarpine in Puerperal Eclampsia.

Dr. James Murphy considers the use of pilocarpine, on account of its diuretic and diaphoretic properties, a valuable adjuvant in the treatment of puerperal eclampsia, as it reduces arterial tension at once, and gives our other remedies time to act. He reports two cases, in which it acted very favorably, in the *Am. Jour. Obstetrics*, December, 1883. He used it hypodermically in doses of $\frac{1}{3}$ of a grain.

Blisters Over the Heart.

Dr. Beverly Robinson recently told the Practitioners' Society of New York (*Med. Record*, December 22, 1883,) that he had been using blisters over the heart in certain cases of chronic cardiac disease, with enfeebled action and accompanying dyspnoea. They were cases where the ordinary methods failed to give relief. The blistering seemed to strengthen the heart's action.

Artificial Urea as a Substitute for Quinine.

The *Jour. d'Hygiène* reports that Dr. Belvouseff, of Charkow, Russia, has used artificial urea (car-

bamide) as a remedy for intermittent fever in place of quinine. It is almost tasteless, and does not depress the nervous system. In Southern Russia, the peasants have used urine as a febrifuge for centuries; this has suggested the rational use of urea to Dr. B.

The Salt Test for Albumen.

In the *Practitioner* Dr. Roberts recommends the following test: The urine is rendered slightly acid with hydrochloric acid, when to it is added a saturated filtered solution of common salt in excess. The albumen, if present, is thrown down. The same specimen of urine can be tested for sugar by adding Fehling's solution.

Sub-Peritoneal Injections of Albuminate of Iron in Chronic Anæmia.

In the *Gazz. degli Ospitali*, No. 35, 1883, Prof. A. Vachetta announces as the result of experiments on dogs that the effects of albuminate of iron are more readily obtained by sub-peritoneal administration than by any other method, and that no inconveniences result from this mode of administration.

Cirrhosis Without Alcoholism.

To the St. Louis Medical Society (*St. Louis Med. and Surg. Jour.*, December, 1883,) Dr. Bernays presented a cirrhotic liver weighing not quite a pound and a half, from a woman who never drank any alcohol. She was tapped three times, and from three to six gallons of liquid withdrawn each time. The kidneys were normal.

Syphilitic Disease of Rectum.

A case in which constitutional treatment had no effect is reported by Dr. Kelsey in the *N. Y. Med. Jour.*, Dec. 8, 1883. Two ulcers just within the anus persisted until strong nitric acid was applied, when the pain left them and in a month they were perfectly healed.

Gummata of the Penis.

There are on record a few cases of ulceration of the penis occurring some years after syphilitic infection, to which M. Ozenne (*Rev. de Chirurgie*) now adds another. In this case, the ulcer was feared to be malignant, but under the use of mercury and iodide of potassium it healed in about a month, thus proving its specific character.

Infantile Rheumatism.

Dr. J. K. P. Caldwell reports (*Louisville Med. News*, December 8, 1883,) a case of acute rheum-

atism occurring in a baby two months old. In spite of the usual treatment (salicylic acid, etc.), the child died on the tenth day of the disease, having had convulsions for two days preceding death.

Persistent Epistaxis.

There are few things more trying to the young doctor (and to the old one too) than a persistent hemorrhage from the nose. As the blood keeps dropping, dropping, dropping, so equally do the physician's spirits. Dr. Guedevo tells us in *L'Indipendente*, November 15, 1883, that he succeeded in controlling two cases with the following, given in teaspoonful doses every fifteen minutes. After some vomiting, the hemorrhage ceased: Tartate of antimony and potash, gr. ij; distilled water, f $\overline{3}$ iv.; simple syrup, f $\overline{3}$ vj.

Alcohol in Trichinosis.

Fortunately, trichinosis is a comparatively rare disease, but when it does occur, the physician who endeavors to cure it has his hands full. Hence, it is well to remember that Dr. Ferrer (*Gac. de les Hospitals, Valencia*) has had most gratifying results in one case from the use of alcohol. The disease had existed for four weeks, when this treatment was commenced. He commenced with six and increased to nine ounces daily, in sugared water, in the intervals of feeding. The patient was completely well in eighteen days.

Diphtheritic Heart Weakness.

Great care and watchfulness are necessary in convalescence from diphtheria for many reasons, and for none more so than on account of the feature noted by Herr Levy, in *Deutsch. Med. Woch.* He has noticed attacks of heart weakness and faintness, without loss of consciousness, the lesion producing which, he believes, resides in the cardiac substance itself, and is not dependent on disordered innervation.

Electricity for Strangulated Hernia.

A hernia (scrotal) as large as a man's head, was completely reduced by Dr. M. Pargamin (*Vratch*) by fifteen minutes faradization and manipulation, when three hours taxis had signally failed. The tumor was faradized in all directions.

Diphtheria vs. Pregnancy.

We are called upon to exercise unusual precautions to isolate pregnant women from cases of diphtheria, for Dr. Ollivier tells us in *Arch. Gen.*

de Med., October, 1883, that it is very likely to produce abortion.

Death from Passion.

Very few persons realize the necessity of cultivating an equable temper and of avoiding passion. With a weak heart or atheromatous cerebral arteries, the giving way to passion may cause a giving way of the heart or a blood-vessel, and thus prove fatal. It was the result of passion that caused John Hunter's weak heart to give out, and we should ever remember his sad fate as a warning.

The Milk of the Bitch.

Dr. Biarchi (*La Union de las Ciencias Medicas of Carthagena*) says that it is much richer in nutritive materials and in sulphate of lime than the milk of other animals. He therefore wisely concludes that if we can procure it in sufficient quantity, it will prove valuable in rickets and tuberculosis. He has had excellent results from its use.

Nitrite of Sodium.

This drug has been, as we know, highly recommended in epilepsy. It now seems from some observations that have been made by Drs. Murrell and Ringer, of London, that the dose usually recommended, namely twenty grains, is dangerously large. They advise that we should commence with two grains, and increase to five if necessary.

Ear Affections in Bright's Disease.

Deafness, more or less marked, is often observed in this disease. Doumerque (*Thise de Paris*) considers this condition due either to œdema of the auditory nerve, tympanic catarrh, or effusion of blood into the tympanum.

The Warm Bath.

When a hard, tense condition of the abdominal walls interferes with examination by palpation, Dr. Mai (*Rivista Clinica*, September, 1883,) places the patient in a warm bath. In a few minutes the abdominal walls become relaxed.

Salicylic Acid for Vesical Catarrh.

Dr. Boegehold (*Deutsch. Med. Woch.*) is inclined to believe that salicylic acid is as much of a specific for rheumatic and gonorrhœal catarrh as it is for articular rheumatism. When chlorate of potash has been of no avail, he has found salicylic acid and salicylate of soda to effect a cure.

CORRESPONDENCE.

The Lancet and Tartar Emetic.

EDS. MED. AND SURG. REPORTER:—

I owe you a Christmas cheer and many thanks for having *deseccrated* your last issue (December 22) with *Tartar Emetic* and the *Lancet*, which, if your Æsculapian worthies tell true, have slain ten thousand times more Philistines than ever Samson did with the jaw-bone of an ass. Will you please spare half a column to one of those old *murderers*, to confess *how* the deed was accomplished? I copy, verbatim, from a letter written and mailed to my friend, *Dr. Hiram Corson*, on the 18th instant, four days previous to your issue, a remarkable coincidence of language.

"*John Mull*, aged about 60, a healthy, industrious farmer, but who had become quite *intemperate*, after several days of extreme exposure to wet, cold and whiskey, returned home sick on the 25th of 3d month, 1829, and went to bed, where he lay, without medical attendance, and with little nursing. On the first of the ensuing month at midnight, I was called to see him. As I approached the house, his loud, stertorous breathing was quite audible in the public road. I found him profoundly comatose, the extremities cold, stiff, and pulseless; mouth and eyes set wide open; the respiration not more than five or six. I had, a year previous, treated an analogous case, and the result led me to adopt a similar course. While hastening the preparation of more general, warm, and stimulating appliances, I immediately placed the hand and arm in pretty warm water, with active bathing and friction, till it became more warm and supple, and then applied the lancet. A single drop of thick, pitchy black blood followed the blade. As the frictions were continued, there was another and another, at shorter intervals; each successive portion appearing more fluid and less pitchy, till it flowed, a stream of blood. When it had reached *six* ounces there was a very obvious change in his condition. At *ten* he indistinctly answered questions, and at *twelve* he was quite cognizant, and the bleeding was stopped. I only state the practical facts, leaving others to form their own conclusions. Convalescence was speedy and complete. This brief narrative, with change of name, would apply equally well to the other case referred to."

E. MICHENER, M. D.

Toughkenamon, Pa.

Pasteur's New Method of Attenuation.

The view that vaccinia is attenuated variola is well known, and has been extensively adopted by English physicians. If the opinion means anything, it signifies that the two diseases are in essence one and the same, differing only in degree. M. Pasteur has recently found that by passing the bacillus of "rouget" of pigs through rabbits, he can effect a considerable attenuation of the "rouget" virus. He has shown that rabbits inoculated with the bacillus of "rouget" become very ill and die, but if the inoculations be carried through a series of rabbits, a notable modification results in the bacillus. As regards the rabbits themselves, no favorable change occurs—they are all made very ill, or die. But if inoculation be made on pigs from those rabbits at the end of the series, it is found that the pigs have the disease in a mild form, and, moreover, that they enjoy immunity from further attacks of "rouget." This simply means that the rabbits have effected, or the bacillus has undergone whilst in them, an attenuation of virulence. So the pigs may be "vaccinated" with the modified virus, have the disease in a mild form, and thereafter be protected from the disease. The analogy between this process and the accepted view of vaccinia is very close. The variolous virus is believed to pass through the cow, and there to become attenuated, so that inoculations from the cow-pox no longer produce variola in the human subject but cow-pox (vaccinia). As an allied process, though of

those who value the help of a tenacious memory. Both memory and stomach are valuable, not in proportion to the burdens they can carry, but in proportion to their training for their part in the work of the system as a whole; and either of them is made effective as much by what is kept from it, as by what is packed into it.

Professor Germain Sée on the Tubercle Bacillus.

This distinguished French teacher declares his belief that whenever this bacillus is detected in the expectoration, tuberculosis can with certainty be diagnosed, even before the disclosure of any other physical sign, for this micro-organism is not discoverable in any other pulmonary affection, whatever be its nature or origin. M. Sée dwelt upon the importance of this sign, as by a knowledge of this fact the physician might, by early treatment, be enabled to prevent the development of the disease, not by attacking the bacillus, which is unassailable when once in the organism, but by placing the patient in such a condition as would enable him to effect the destruction of the parasite, or, at any rate, to resist its baneful influence on the system.

Anecdotes of Sir Astley Cooper.

Sir Astley Cooper is said to have been in such haste to reach his out-of-town appointments that he urged the drivers of the post chaise thus: "I give three pence a mile to a boy who drives slow, four pence to one who drives fast, and six pence to one who drives like the d——." He lived in grand style and was very fond of money. It is stated that in his last years while at a country seat he turned an honest penny by buying up disabled horses and by his surgical knowledge restoring them to health and usefulness and disposing of them at a large profit."

The Physiological Action of Coffee.

In the *Brit. Med. Jour.*, we read that according to the result of experiments recently made by Messrs. Couty and Guimaraes, to ascertain the precise physiological action of coffee, that beverage is not a preventer of tissue-waste. The maintenance of nutrition is, no doubt, improved by its consumption, as Gubler asserted; but simply because it involves an increased assimilation of nitrogenous food through improving the appetite, when not taken in excess, and thereby encouraging its consumer to take nutritious food.

Memory.

The *Med. Record* very sensibly says: A man's memory is like his stomach. To do its best work it must have good treatment. It must neither be neglected nor overloaded. It can easily be so abused by neglect, or by irregular and unsystematic employment, as to become chiefly a cause of annoyance and discomfort; or, again, it can be so overworked and heavily taxed that it becomes practically the chief organ or agent of the entire system, every other portion dwindling in its comparison. The latter course is the great danger of

sions to the *Annales d'Hygiène*: In non-smokers of average constitutions the mean temperature of the twenty-four hours amounts to 36.76° C. (or about 98° Fahr.), and the pulse-rate 72.9°. In smokers the temperature reaches 37.02° C. (98.6° Fahr.), and the pulse-rate 89.9°. Tobacco-smoking, therefore, raises the temperature 0.26° C., and the pulse-rate 16°. In persons of feeble constitutions the temperature rises 0.43° C., and pulse-rate 11.9°. Taking a mean, tobacco may be said to raise the temperature 0.29° C. (nearly 1° Fahr.), and to increase the cardiac pulsations by 12.7°. Representing the normal temperature at 1000 in non-smokers, in moderate smokers it rises to 1008; and whereas the pulse of the former may be taken at 1000, that of the smoker is 1180. It is by increasing cardiac pulsations that tobacco has such an injurious effect on some constitutions.

ulate his mental faculties. He gradually increased the quantity until he would take as much as thirty ounces (partly by drinking and partly by inhalation) in twenty-four hours. During his sober periods, his mental faculties were very bright, and his health did not seem to suffer from the indulgence.

An Interesting Inquiry.

A circular has been sent out by Dr. W. Thorn-ton Parker, of Morristown, New Jersey, which we willingly publish as a matter of general interest:

DEAR DOCTOR: In view of the fact that the matter discharged from mucous patches in syphilitic cases is inoculable, is it not, in your opinion, possible for such contagion to be conveyed through contact with the cup used in the Holy Communion?

Have you observed any case in which this accident has occurred?

If more than one case observed, please state how many.

Is it customary for the clergy, in your experience, to use a napkin to wipe the cup before passing to the next communicant?

How many do you know of who take this precaution?

Is such protection, in your opinion, necessary or advisable, and is the napkin sufficient?

The cup is passed so rapidly from mouth to mouth, is not the danger great enough for the medical profession to caution the clergy on this subject?

Those who have any facts to contribute to this investigation should send them to Dr. Parker.

Suspension of Another Journal.

The editors of the *Archives of Medicine* announce its suspension after a satisfactory existence of five years. The editors are Drs. E. C. Seguin, and R. W. Amidon. We sincerely regret this suspension for the *Archives* is a most worthy journal.

Items.

—It is proposed to erect a monument to the late Dr. J. Marion Sims.

—Fifty thousand persons died between June and September during the cholera epidemic in Egypt.

—Anatomical material is very scarce in Vienna this winter, owing to the large number of first year students.

—Dr. George Stiles, of Conshohocken, who was so long and dangerously ill, is once more attending the duties of his profession.

—Dr. J. P. McGee, of Trenton, Tenn., has recently been appointed to the professorship of Principles and Practice of Medicine in the Memphis Hospital Medical College.

—In the *Vratch*, Dr. v. Devlezersky recommends salicylate of soda in doses of 2½ drachms for migraine. One dose at the beginning of the premonitory signs, another one hour later.

—The study of histology ought to be insisted upon before permitting medical students to attempt the study of pathology; not by lectures alone, but by the use of the microscope in the laboratory.

—Egyptian Rags are hereafter to be disinfected before shipment to this country. This precaution has been inaugurated by the State Department at

the request of Surgeon-General J. B. Hamilton, of the Marine Hospital Service. Pressure under steam and such other measures as may be found to be efficient for the purpose will be used.

—In the *Detroit Lancet*, December 1883, Dr. A. B. Ballou reports a case of complete fracture of the upper portion of the left side of the forehead, and escape of brain substance with perfect recovery.

—Dr. Dudley S. Reynolds has resigned the editorship of, and sold to other parties, the *Medical Herald*, which he has so ably edited for the past five years. Drs. Edward Miller and W. H. Galt will be the new editors.

—Dr. A. Tepliaschin (*Vratch*, 1882, No. 35,) recommends a thin stream of cold water from a teapot lifted from one to one and a half feet from the abdomen, in cases of colic. He has seen it relieve pain when opium and morphia had failed.

—"Infants should never be taught to eat candy, as it almost certainly causes engorgement of the lymph channels, thus tending to develop that state commonly called the strumous diathesis." This item is from a reputable journal; if there be any truth in it, our wonder is that we ever see any children that are not strumous. Besides they are never taught, it comes "kinder natural."

—A Crematory Association has been formed in Washington, and Congress is to be asked to give it a charter. A German physician has given a lot on which to erect a crematory similar to that in Washington, Penn. One of its members says that the expense of burning a body will not be more than \$35, and that soon they may be able to reduce it to \$20.

—Six ladies have distinguished themselves as students in the South London College of Chemistry, where they have been studying with a view to passing the examinations of the Pharmaceutical Society. They intend to begin life as druggists, and are amongst the first women who have been regularly trained at a public school for this end.

—Adulteration of milk in London has, according to G. W. Wigner, F. C. S., been reduced to a science. Of three hundred samples obtained in one day from different districts, only three per cent. showed no adulteration. The average of all the milk showed nineteen per cent. of added water, and it is estimated that milkmen get \$1,330,000 annually by selling water.

—A commission on the law of insanity has been nominated in France by the Senate, under the Presidency of Dr. Duprez. The members of the Committee propose visiting the principal establishments of the insane in England, France, Belgium, and Scotland, and are employed in considering and settling the details of a new law of lunacy for France, and are taking the evidence of most of the eminent experts there on the subject.

—A Dental Institute is to be added to the Berlin University, and plans for its organization have been submitted to the medical faculty. The consideration in which American dentists who have established themselves in European cities are held and the prices which they are able to charge furnish sufficient proof that such an insti-

tution is needed in other countries besides Germany.

—"Have you given electricity a trial for your complaint, madam?" asked the minister, as he took tea with the old lady. "Electricity?" said she. "Well, yes, I reckon I has. I was struck by lightning last summer, and hove out of the window; but it didn't seem to do me no sort of good."

—A young lady in a Philadelphia seminary was heard to say that the warm weather made her "sweat." A teacher who overheard the remark reproved her in these words: "My dear, bear in mind that horses sweat, men perspire, and young ladies get in a glow."

—A good story is told by *New Remedies* of a Brooklyn druggist who was much annoyed by boys ringing his night-bell, and then decamping. He determined to lie in wait for his tormentors, and arming himself with a stick, sought a convenient ambush. By and by a man appeared and took hold of the bell-handle, when the irate druggist pounced upon him and belabored him soundly. The man had a prescription in his hand, and now seeks legal redress.

—During the performance of a thrilling play in Norwalk, Conn., lately, a well-known physician of the town, who seldom entered a theatre, was among the audience. When the part came where the heroine swallowed the poison, is dying, and her lover and friends are wringing their hands and crying, helplessly, "What can be done?" the doctor was seen to be laboring under considerable excitement. At last the terrible scene was too much for him, and, forgetting where he was, he jumped to his feet and shouted: "Give her coffee, you fools; give her coffee!" Then a friendly hand pulled him back into his seat, and the surprised actors went on with the play.

OBITUARY NOTICES.

DR. JOHNSON ELIOT.

The distinguished Dr. Johnson Eliot, who died in Washington, December 30, 1883, was one of the brightest lights in American medicine. He was descended from the colonial settlers of Massachusetts and Maryland. He was born in Washington city, August 24, 1815. In 1839 he began the study of medicine under Dr. Thomas Sewall, being at the same time steward in the Naval Hospital. He matriculated in the Medical Department of Columbian College in 1842. Immediately upon graduation, he was appointed Demonstrator of Anatomy in Columbian College, and in 1850 was appointed Professor of Anatomy in the Medical Department of Georgetown College, which department he was instrumental and foremost in giving life to. In 1869 he received from Georgetown University the honorary degree of A. M., and 1872 Ph. D. In 1861 he resigned the Chair of Anatomy and took that of Surgery in the same institution, retaining it till 1876, when he was made Emeritus Professor of Surgery and Professor of Clinical Surgery, and for the past sixteen years has been Dean of the college. In 1874 he was President of the Medical Society of the District of Columbia, and in 1877 one of the Board of Censors.

He was one of the Vice Presidents at one time of the American Medical Association, and since 1852 has been annually a delegate to the conventions of the Association. Since 1864 he has been surgeon to the Metropolitan Police. In 1861-2-3-4, he was physician to the City Small-pox Hospital, and has been an attending surgeon to the Providence Hospital, consulting surgeon to St. Ann's Infant Asylum, Columbia, and Children's Hospital, and was prominently connected with all the charitable institutions and organizations. He was an eminent surgeon, and one of the most extensive and charitable of practitioners—a friend to everybody, a man of great industry, whose social qualities endeared him to many. His death was caused by pneumonia, after a short illness of eight days.

QUERIES AND REPLIES.

Query, Iowa, writes: "Will you please give in the *REPORTER* the results of the treatment of hernia by the insertion of galvanic needles. A traveling doctor is in these parts professing to cure it by this means."

Ans.—We do not believe that this treatment is of any value, but leave the query open to others.

Dr. R. S., of New York, sends a cutting where it is said that lately in Buffalo a boy contracted hydrophobia from another boy by sleeping with him! The latter had been bitten by a rabid dog. The inquiry is as to the probable truth of the statement. Knowing nothing of that particular case we can only say that we doubt the story.

Dr. P. L. M., of Tenn.—Blistering in diphtheria is of ancient date, and has been lately defended in some quarters, but the general sense of the profession is, we think, against it.

MARRIAGES.

FOX—BROWN.—In Philadelphia, December 19, 1883, by the Rev. William Brenton Green, Jr., Dr. Charles W. Fox and Alice M., daughter of John H. Brown.

MASON—DICKSON.—In Brooklyn, N. Y., on Thursday, December 20, 1883, by the Rev. Alfred DeWitt Mason, assisted by the Rev. H. J. Van Dyke, D. D., Lewis D. Mason, M. D., of Brooklyn, N. Y., and Fannie W. Dickson, daughter of the late Hon. J. D. Witherspoon, of South Carolina.

VAN DEUSEN—SMITH.—In Philadelphia, November 28, 1883, by the Rev. John McElmoyle, Edwin H. Van Deusen, M. D., and Adelaide P. Smith, both of Philadelphia.

McSMITH—KEISER.—At the residence of the bride's parents, Tuesday, December 18, 1883, by the Rev. J. C. Behny, S. McSmith, M. D., and Miss Cora C. Keiser, daughter of Mr. J. C. Keiser, of Plainfield, Cumberland Valley, Pa.

FLINT—HAY.—At Portland, Maine, December 25, 1883, by the Rev. T. A. King, Dr. William H. Flint, of New York city, and Miss Mary Adelaide, daughter of Henry H. Hay, Esq., of Portland.

DEATHS.

HILTON.—At East Orange, N. J., on Friday evening, December 21, 1883, Dr. A. T. E. Hilton, in the seventy-first year of his age.

ELIOT.—In Washington, D. C., Sunday, December 30, 1883, of pneumonia, Dr. Johnson Eliot, aged sixty-eight years.

GARDNER.—At Vernon, Oneida county, N. Y., Saturday, December 29, 1883, after a long illness, Dr. H. Dwight Gardner, of Utica, N. Y., in the twenty-ninth year of his age.

ROGERS.—At Paterson, N. J., December 30, 1883, of pneumonia, Dr. John A. Rogers, son of Dr. Alexander W. and Anna H. Rogers, aged thirty-one years.

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ORIGINAL DEPARTMENT.

LECTURE.

ON THE PROGNOSIS OF PULMONARY PHTHISIS, ESPECIALLY OF DOUBTFUL FORMS OF THE DISEASE, BY THE PRESENCE OF BACILLI IN THE SPUTUM.*

BY PROF. GERMAIN SÉE,

Member of the Academy of Medicine, Member of the Faculty of Medicine, Physician to the Hôtel Dieu, Paris, France.

GENTLEMEN: In accordance with the conclusive histological researches of Cornil and Herard, Gracher and Charcot, phthisis ought to be considered as a unity, and the kind of pneumonia attended with wasting of the lungs, and known as caseous pneumonia, is only a variety of phthisis. That which is true for phthisis in the human subject, is also true for the induced phthisis of animals, for proof of which statement I need only refer you to the brilliant experiments of Villemin. It results from these considerations that the primordial element of phthisis is, as Laennec had anticipated, a specific principle. We may add to-day that this element is virulent, transmissible, in fact, of parasitic nature, and the specific germ is none other than the bacillus discovered by Koch.

These bacilli, which present themselves under the form of thin rods, whose length equals the quarter or the half of a blood corpuscle, are met with in all the tuberculous products of men and

animals. They also occur in the secretions, and notably in the sputa, and even, though in less quantity, in the blood, the urine, and fecal matters.

They are also equally met with in the lesions of scrofula, adenitis, osteitis, and Cornil and Besnier have found them in lupus.

What well shows the influence of these bacilli on the development of phthisis, is the fact that from whatever source you obtain them, they invariably produce tuberculosis when you inoculate animals with them. They even accomplish this result more surely than tuberculous matter itself. From this point it is inferred that the bacillus is the most important element of tuberculosis. It is the unimpeachable evidence of the disease. It is plain then that we have here a valuable datum for diagnosis, and that from the presence or the absence of this parasite in the expectoration we are warranted in affirming the existence or non-existence of phthisis.

The first investigations made to discover the presence of bacilli in the sputum go back to Koch, who was speedily seconded by Ehrlich, Balmer and Frankel, Cornil and Babes, Strauss, etc. All these authorities came to this conclusion: that the bacillus exists in the sputa of all tuberculous patients, while it is wanting in patients affected with any other pulmonary complaint. The number of these microphytes varies according to different circumstances; at the same time that we cannot derive any prognostic value whatever from this variability.

These facts may be of great service when it is a question, not of confirmed phthisis, but of doubted

*Translated from advance sheets furnished by the Professor for the MEDICAL AND SURGICAL REPORTER, by E. P. Hurd, M. D.

phthisis; and it is this subject principally which I desire to speak of to-day.

We may admit three kinds of phthisis difficult to recognize:

1. *Latent phthisis*, characterized solely by a hacking, teasing cough, scanty expectoration, without modification of the respiratory murmur, or percussion dullness. In these conditions, as it is not necessary that the morbid process should go on to the destruction of the mucous membrane for the bacilli to appear on the bronchi, the examination of the expectoration may settle the diagnosis, in the absence of all stethoscopic signs.

To this same category belong those cases where hemoptysis opens the series of tuberculous accidents, the nature of the hemorrhage not being at first apparent. The discovery of the specific microbes in the bloody sputa of the patient removes all doubt. I have at this moment in the wards of the Hôtel Dieu a female patient who entered the hospital for spitting of blood, dating back only a week. Nothing in her condition seemed to indicate phthisical disorder. Nevertheless, the examination of the sputa having revealed the presence of bacilli, I made the diagnosis of tuberculosis. At this present time, a month since the entry of this woman into the hospital, there are incontestable signs of a pulmonary cavity. We can even infer from this early discovery of the bacillus, that the hemoptysis (the first sign, it may be) is not the cause, but the consequence of the tuberculosis. What confirms this view of the case is that inoculation with blood sputa of hemoptoic patients has been made on animals, and has constantly determined veritable experimental phthisis.

Après of these premonitory hemoptyses, I recall to mind that of late it has been alleged that a certain number are of arthritic origin, and get well, while others, of tuberculous origin, are certainly mortal. This opinion does not seem to be justified, for even tuberculous hemoptyses sometimes get well, and you cannot tell that hemoptysis is not tuberculous till you have failed, after repeated examination, to find the specific microbe.

The bacillus test may render great service in the diagnosis of acute miliary phthisis and typhoid fever, diseases often confounded. The presence, duly noted, of bacilli in the sputa of these patients, suffices to exclude the hypothesis of typhoid fever.

2. The *larval phthisis* are those which commence under the form of an acute disease of the respiratory organs, which masks the characters proper to tuberculosis. Here the examination of the

sputa will clear up the diagnosis.

I here present a few cases which substantiate my position.

A man, aged nineteen years, presented himself at the Hôtel Dieu on the 13th of September, with all the signs of acute lobar pneumonia. At the end of nine days defervescence did not regularly establish itself; we examined the sputa and found bacilli. The diagnosis of tuberculosis was made, and by the first of October there were marked signs of cavities in the lungs.

The same history will apply to another patient affected with pneumonia of the right lung, which was at first regarded as simple and benign. At the end of three weeks, complete defervescence not taking place, we examined the sputum, and after three unsuccessful trials, we found the bacilli in sufficient abundance, and all the signs of true phthisis soon declared themselves.

The same thing may happen in the case of bronchial patients. A young man, eighteen years old, took a violent cold, a cough set in for the first time in his life, and he entered the Hôtel Dieu; we recognized on examination only the chest signs of simple bronchitis. We examined the sputa and found bacilli. The patient at the same time got better, and thought himself almost well, when we found at the right apex moist crackling, followed by loud bubbling rales.

A man of sixty-eight years of age entered the service of M. Hayem, with a cough that had lasted a fortnight; auscultation and percussion revealed only the signs of bronchitis, but the sputum contained bacilli. Three days afterward the patient died, and the autopsy disclosed tubercle granulations in the lungs.

The same remarks are applicable to many cases of laryngitis.

A man of forty years of age was attacked several weeks previously with laryngitis. The examination of the different organs did not give any clue to the nature of the disease, whether simple, tuberculous, or alcoholic. The sputa contained a certain quantity of bacilli, and the diagnosis of tuberculosis was made. The result proved the correctness of the diagnosis.

It is well known that pleurisy often ushers in tuberculosis, but it is seldom that an accurate diagnosis can be made from the first. In these cases examination of the liquid in the pleural cavity, whether pus or serum, would be likely to render valuable assistance. M. Rabinski, interne under M. Vulpian, has communicated to me the following interesting observation:

A patient, afflicted with purulent pleurisy, re-

mained four months in a condition sufficiently grave, without, however, any evidences of tuberculosis by the ordinary physical signs. M. Dermie examined on three occasions the liquid of the pleural cavity, and once only he succeeded in finding one solitary bacillus. Three weeks afterward humid cracklings were heard at the apices, and a new examination of the pus from the pleural cavity revealed the presence of numerous bacilli. The autopsy showed later that the disease was tuberculosis.

3. A third category of phthisis difficult of diagnosis, comprehends *pseudo-phthisis* with cavities, due to causes other than tubercles; a tumor, an ulcerated syphilitic gumma, bronchiectasis, etc. In these cases the symptoms remind you of advanced phthisis, but the examination of the sputa, in showing the absence of bacilli, suffices to settle the diagnosis, and saves you from mistake.

The following case is an instance in point :

A man reduced to the last degree of physiological wretchedness, entered the Hôtel Dieu with the signs of a cavity at the apex of the lung. As this patient had no fever, we had doubts as to the tuberculous nature of the disease, and examined the sputa. Not a single bacillus could be found. At the end of a month the patient recovered his appetite, his general condition was materially improved, and he shortly left the hospital, to all appearances cured. M. Debove and M. Moussen have published similar cases.

Finally, the detection of bacilli in the sputa has enabled us to solve a much-controverted question of pathogeny, to wit, whether the chronic catarrhs of diabetic patients are due to phthisis, or have a quite special etiology. The researches of Sommermann, of Rutemeyer, of Leyden, of Merkel, of Reigel, in showing the presence of bacilli in the sputa of such patients, have proved that the phthisis of diabetes is a true tuberculosis.

COMMUNICATIONS.

DIPHTHERIA—ITS TREATMENT.

BY J. N. COONS, M. D.,

Of Palmyra, Missouri.

Diphtheria is by common consent a dangerous disease, the more so because it seeks its victims chiefly amongst our little ones, whose tissues and vital organs have so much less resistive power than those of mature years. It is *dangerous*, because the onus of its attack is upon the *gateway* of life—the *avenue* through which every particle of

nutriment, every breath of life must pass, and the congestion and swelling of whose walls and adjacent structures not only makes painful or impossible nutrition and æration, but also by its pressure deranges the blood supply of the brain, the nervous supply of the body, produces a general nervous shock, with headache, cold extremities, and aching limbs, followed by a reactionary fever of a more or less marked irritative type. The danger is further enhanced by the septic infection certain to ensue if the disease be not arrested ere decomposition of the adventitious deposits in the fauces.

The thought largely obtains that diphtheria is curable *only* by the administration of antiseptics, constitutional *antidotes* (?) to the blood poison. But alas! experience teaches that ere we can saturate the system with these antidotes (?) our patients die from the effect of the injuries inflicted by the local disease at the gateway of life—die from starvation, from asphyxia, from asthenia, from nervous prostration, *exhaustion*. Then, why not rather bend our energies to the arrest of the local mischief, and the prevention or relief of its consequences, whilst our systemic antiseptics are so *slowly* antidoting (?) the blood-poison?

About 23 years ago, in Shelby county, Mo., I first encountered an epidemic of diphtheria. It appeared in the practice of a neighboring physician some eight miles distant from Shelbyville, where I then was located. It was of a virulent type, and there were many deaths. I was shortly called to assist him. Together we tried faithfully the systemic antiseptics and the local “scotching” by caustics, *et id omne genus*, at that day so highly commended. The result was the loss of nearly one-third of our patients.

I was not satisfied, and shortly after its appearance in my own practice, I resolved that in addition to systemic treatment—antiseptic and otherwise adapted to meet varying exigencies—I would treat the local disease, not as a *specific* horror to be stamped out, but as I would any *simple* local inflammation, in accordance with the general principles of medicine and common sense, trusting that as the inflammation subsided, the false membrane, the deposit from which so much was feared would be cast off, and the septicæmia be arrested in its development, if not absolutely prevented.

To this end I adopted the following line of treatment—constitutional and local—save a few slight changes, such as later discoveries and improvements with extended experience have commended to my approval and adoption. Under it,

in the same epidemic, and in others since, I have treated many hundred cases of diphtheria, and have had the satisfaction, where I have been called early in the case, of losing but little more than one per cent.

Believing this success phenomenal, and due not to the mild character of the cases treated, nor to any superior skill on my part, but rather to the fortuitous adaptation of means to the end sought, coupled with diligent nursing, I submit in all diffidence my plan of treatment, simple though it be, to the consideration of my medical brethren.

Given, a typical case of diphtheria of average malignity, in a child of eight or ten years of age, at an early stage of the disease—for then only is treatment of most avail—I would give, if the nervous chill has not passed, a teaspoonful of tinct. opii camph. to calm the nervous shock and quiet the aching limbs, after which I would clear the alimentary canal by a mild laxative, and at once give the following:

R. Potassii chloridi (not chloratis), $\mathfrak{z}j$.
Tinct. ferri chloridi, fl. $\mathfrak{z}ij$.
Syrupi scillæ, fl. $\mathfrak{z}ss$.
Syrupi simplicis, q. s. ad. fl. $\mathfrak{z}ij$.

Misce. Sig.—One teaspoonful in a little syrup or water every three hours; to be continued throughout the disease, but at lengthened intervals, after all diphtheritic membrane shall have disappeared.

With each dose of this alterative syrup I would give (according to frequency and hardness of pulse) from two to six drops of tinct. veratri viridis, till the pulse has been reduced to normal frequency and softness, and then in lessened doses every six or eight hours, till cessation of all tendency to febrile excitation.

Should an expectorant seem called for, I would direct:

R. Tinct. sanguinariæ canad.,
Tinct. ipecacuanhæ, $\mathfrak{a}\mathfrak{a}$ fl. $\mathfrak{z}ss$.
Tinct. opii camphoratæ, fl. $\mathfrak{z}ss$.
Syrup. tolutani, q. s. ad. fl. $\mathfrak{z}ij$.

Misce.—Teaspoonful as needed to loosen or quiet cough.

From the first, food of some kind, preferably milk, soup, or other liquid or soft animal food, should be given at least as often as every three hours—say after each dose of medicine. Fruits, most vegetables, and acid syrups, are forbidden. As the vital powers weaken, cream toddy, egg-nog, and occasional two-grain doses of quinine or salicine (the last preferably in capsule, to avoid faucial irritation) serve to bridge over the period

of weakness, whilst possibly neutralizing the poison of the disease.

Local Treatment.—Believing that the systemic infection largely springs from the constant inhalation and ingestion of the putrid products of the local disease, coupled with the retention of effete matters produced by the irritative fever, I consider the local treatment quite as important as the systemic.

If hot fomentations be good for an inflamed hand, why not for an inflamed and swollen throat? We will try them; and knowing the solvent power of acetic acid over diphtheritic membrane, we will add to the fomenting water as much acetic acid as we may without irritation of the external surface (from 1-8 to 1-16 part), trusting that the inhalation of the vapors ever rising from the hot fomenting cloths will stimulate secretion and prevent deposit, if the vapor do not also redissolve membrane already formed in the fauces and air passages. The fomentation may be by flannel cloths or sacks of linseed meal reaching across the front of the neck from ear to ear, and kept frequently wetted in the hot diluted acetic acid (or vinegar in its absence), and well covered with dry flannels to preserve the heat. Should the skin become irritated, the proportion of acetic acid must be lessened, or it must be omitted altogether from the fomenting liquid, lest we have a raw surface, forming a new nidus for the further extension of the disease. For direct application to the diseased fauces, nares, etc., I have found nothing so good as a saturated solution of chemically pure acetate of lead, to which may be added, when necessary (which is rare), a non-irritant antiseptic. This solution may be best applied in spray by means of an atomizer, but a gargle is of service, and the following powder dusted upon the parts will materially assist in causing the removal of any diphtheritic deposit formed in the fauces:

R. Plumbi acetatis (C. P.) pulv., $\mathfrak{a}\mathfrak{a}$ $\mathfrak{z}j$.
Pulv. gum. acaciæ, $\mathfrak{a}\mathfrak{a}$ $\mathfrak{z}j$.

Misce. Sig.—A small quantity to be blown upon the diseased parts two or three times a day. This may be done through a roll of letter sheet.

When the larynx becomes involved, the inhalation of hot steam from a saturated solution of acetate of lead in dilute acetic acid furnishes probably as hopeful treatment as any with which we are acquainted.

Summing up.—Relieve nervous shock, clear the alimentary canal, give veratrum viride till its constitutional effect is felt in a softening and slowing of the pulse, give the iron and chloride of potassa alterative steadily throughout the disease, adding an expectorant when needed; and most important,

foment assiduously for the first few days, applying the acetate of lead freely and often to the diseased fauces. Lastly, forget not to feed liberally throughout the disease, and to stimulate and support freely by alcoholics and tonics, as the exigencies of the case call for, in the wane of the disease.

TINCTURE OF GUAIAIC IN THE TREATMENT OF ACUTE SORE THROAT.

BY JOS. B. POTSDAMER, A. M., M. D.

Read before the Philadelphia Laryngological Society.

The term sore throat being both general and vague in its application, I am still led to its use, there being no other word which would embrace, and at the same time indicate, the diseased parts which are to be treated with the remedy to which I wish to call attention. In an inflammation of the throat, we find the inflammatory action most intense at certain points; at times, the tonsils bearing the blunt; again, the posterior wall of the pharynx, etc. The tincture of guaiac has been used without reference to this point.

Before relating the cases I have had under treatment, I will quote the opinions of various authorities: H. C. Wood, in his "Therapeutics;" Trousseau, in his "Clinical Medicine;" Chas. E. Squarey, in "Reynolds' System of Medicine," and Austin Flint, Sr., in his "Principles and Practice of Medicine," make no mention of the drug in the treatment of this disease.

Stillé, in his "Materia Medica," says: "Guaiac has been recommended in tonsillitis by Dr. Hanney, of Glasgow; Mr. Bell, Dr. Carson, and Mr. Carter. According to their statements, it abates pain and inflammation with singular rapidity and uniformity." He does not seem to have had any personal experience with the drug in this disease.

Stillé and Maisch, in the "National Dispensatory," second edition, page 698, in speaking of guaiac, say: "In simple tonsillitis and diphtheria it is alleged to be very efficacious, but the former disease gets well spontaneously, and the evidence of the value of guaiac in the latter is inconclusive."

In his "Practice of Medicine," Dr. Fred. T. Roberts states that guaiacum has been supposed to exert a special influence upon the disease in question.

Phillips, in his "Materia Medica and Therapeutics," endorses the use of the drug in the following terms: "Recent clinical experience has shown that guaiac is a capital remedy in tonsillitis. Given in half-drachm doses (tincture) every four hours, it appears to abate the inflammation and to cut short the disease in a remarkable manner."

It is hardly necessary to state that Morell Mackenzie and J. Solis-Cohen are among, if not the most active, supporters of this mode of treatment.

I was first led to use this treatment in the winter of 1879, and then only after a succession of trials upon myself. During that winter I was subject to attacks of sore-throat. The first, which occurred in November of that year, was quite severe, and was entirely cured in two days. About six weeks later, after exposure to wet and cold, was threatened with another attack, having sharp pains in the region of the tonsils and difficulty in swallowing. The parts were highly congested. This attack was aborted by the prompt use of the ammoniated tincture of guaiac in half-drachm doses every three hours. Was well in twenty-four hours. Two subsequent attacks were aborted in like manner. Since then have not had a recurrence.

The following are some of the cases I have treated with the drug:

Case 1. L. F., æt. 23, German, admitted to Jewish Hospital, January 21, 1883. Had sore-throat for three days prior to admission. Complaints of pain and difficulty in swallowing—former most severe on left side. Pain and stiffness in the muscles of the back of the neck. Tonsils, pharynx, uvula, and arches of the palate, inflamed and swollen. Uvula slightly oedematous. Whitish patches on left tonsil. Some fever. Pulse accelerated. Half-drachm doses of tincture of guaiac in glycerine every three hours. A weak solution of chlorate of potassium was used as a gargle three times a day.

January 23. Throat much better. Patches on left tonsil gone. Both tonsils and uvula of normal size. Inflammation subdued. Pain was gone within twenty-four hours of the commencement of treatment.

January 25. Patient well. Appearance of throat normal.

Case 2. H. P., æt. 35, single, German, admitted November 28, 1882. Is subject to attacks of sore throat. When in health, tonsils are somewhat enlarged. Had severe sore-throat for ten days prior to admission. Temperature 103° F. Pulse 108. Posterior wall of pharynx, roof of mouth, uvula, and tonsils very much inflamed. The latter greatly swollen, filling up the entire isthmus of the fauces. Left tonsil more inflamed than the right. The parts are covered with a dirty greenish-yellow membrane. The physician who saw the case prior to admission was in doubt as to whether this was a case of diphtheria or one of acute sore-throat. Patient was very weak. Bow-

els constipated. Tongue coated. Anorexia. Severe pain in throat. Gave an ounce of epsom salts. A drachm each of tincture of guaiac and glycerine were given every three hours. A weak solution of chlorate of potassium was used as a gargle. A local application of the tincture of the chloride of iron was made twice daily.

December 1. Patient much better, swelling diminishing, patches off tonsils, pain gone.

December 3. All trace of inflammatory action has disappeared. Tonsils reduced to normal size.

December 4. Treatment stopped, patient well.

Case 3. F. B., æt. 11, admitted December 28, 1882. Has complained of sore throat for a few days prior to admission. Arches of palate, uvula, and tonsils inflamed and painful. Latter enlarged and covered with dirty greenish patches. Some fever. Treatment: Tincture guaiac twenty minims in glycerine every three hours.

December 29. Pain relieved.

January 1, 1883. Patient much better.

January 4. Patient well.

Cases 4, 5, and 6. Similar to preceding one; well in five, four, and three days respectively on guaiac treatment.

Case 7. T. B. caught cold April 29, 1883. Complained of pain in the throat and difficulty in swallowing. Arches of palate injected. Gave 45 minims of tincture of guaiac every three hours. All symptoms disappeared after the second dose had been taken.

Case 8. H. B., similar to preceding one. Cured after a few half-drachm doses of tinct. guaiac.

Case 9. W. D., æt. 14, came to M. A. Loeb Dispensary on April 25, complaining of sore-throat. Pain and difficulty in swallowing. All parts of the throat were inflamed. Ordered half-drachm doses of tincture of guaiac every three hours.

April 29. Almost well. Medicine had been taken thrice daily instead of every three hours.

May 1. Well.

Trousseau, adhering to the view that this disease gets well spontaneously, makes no attempt to cut it short. Summing up the opinions of the various authorities quoted, we must come to the conclusion that those who have given the drug a fair trial have noted the efficacy of it not only in ameliorating the symptoms, but in cutting short the disease. As Mackenzie in his work on "Diseases of the Throat," says: "In cases of deep tonsillitis the treatment required is more active, but fortunately there is a remedy which, if administered at the onset of the attack, will almost always cut short the crescent inflammation. This is guaiacum."

The practical deductions that I draw from the cases that have been under my treatment are:

1. The almost instantaneous relief from pain.

2. The improvement in deglutition which always accompanies the former.

3. The early diminution of the swelling.

4. The short course of the disease—all the cases having been practically well on the fourth day of treatment, if not sooner. As an argument against the last deduction might be urged that the disease has run its natural course and terminated by limitation, that this is not so can easily be seen by referring to the cases related, some of which were sick from three to ten days prior to the beginning of the treatment.

5. If the case comes under treatment early enough, the disease can be aborted.

Even if we were to agree with Trousseau and others, in admitting that the disease must run its natural course, we have no right to act supinely, as by the use of guaiacum we certainly ameliorate and, as I believe, cut short the disease.

1644 North 8th street, Philadelphia, Pa.

TREATMENT OF GONORRHOEA, EPIDIDYMITIS, AND ORCHITIS.

BY JOSEPH L. BAUER, M. D.,
Lehighton, Pa.

Surgeons are agreed that gonorrhœa is one of the most obstinate affections in their curriculum. Whether this is due to the peculiar construction of the urethra, to the ineffectiveness of our therapeutics, or to the want of a proper etiological and pathological basis, it is difficult to say. This much is true, that gonorrhœa gets well of itself, is relieved by certain forms of medication, is prolonged into a chronic condition, or is affected by its complications.

It has often been said that a reasonable knowledge of disease makes the physician not only cautious, but creates a doubt as to the *post hoc*, *propter hoc*, of special medication. But in no field of surgery is such wanton recklessness displayed as in the treatment of gonorrhœa. Indeed, oft-times the urethra is considered to be an iron pipe, into which all irritating nostrums can be introduced *ad libitum*. Such therapeutics have no basis whatsoever; the DISCHARGE must be cured at all hazards, irrespective of consequences. It is therefore reasonable to suppose that the complications of this disease are in great part due to the methods in use to relieve it. I think it is settled that the abortive treatment is unwise and illogical, that it does more harm than good. But unfortu-

nately, the dictum of authority has not as yet reached some of the "knowing ones," who still believe that gonorrhœa is only a "nine days' wonder." Since the "bacteria craze" has transformed our "ancient notions" of some of the infectious diseases, new forms of treatment have been directed against this disease, with the purpose of destroying the dangerous bacterium and curing it. This discovery has created new forms of medication, and has introduced bichloride of mercury, boracic acid, permanganate of potash, eucalyptol, carbolic acid, and iodoform, into gonorrhœal therapeutics.

While connected with the St. Louis College of Physicians and Surgeons, I had an opportunity of testing the merits of some of these remedies; and my experience has taught me that boracic acid and iodoform answer many indications. I have found also that iodoform *acts promptly* as soon as the disease shows itself; whilst boracic acid has a beneficial effect when it is passing off. Unfortunately, patients only consult their physician when the affection is under full headway, which would necessitate other forms of treatment. Always believing that our "radical" specialists were inflicting too much injury upon a very sensitive tube, I naturally took to the very conservative plan suggested by Prof. Louis Bauer, of St. Louis, and modified somewhat by Dr. Alex. Mullen, of Michigan City, Indiana. The treatment is about as follows:

R. Inf. sem. lini,	ex. 3 ij. p. 3 vj.
Ext. opii aquosi fluidi,	gtts. xx.
Plumbi acetatis,	grs. vj.

M. D. S.—Inject thrice daily, previously cleansing the urethra with warm water.

Since using this treatment, I have not met with a single case complicated by epididymitis or orchitis. At first glance, we can perceive the rationale of this treatment, and I omit, therefore, any therapeutic explanation.

Frequently, cases of orchitis and epididymitis come to us from other sources, and require immediate relief. Suggestions have been offered of late, which bid fair to take a permanent position in our surgical armory. Some opportunities have offered themselves to me to test them, and I hope that my experience will be of advantage to others. Up to this time, I had only made use of local applications and strappings, and whilst having a fair result, recovery was slow and irksome.

In the July number of "Braithwaite's Retrospect," I noticed an article by Edward Henderson, M. D., F. R. C. S. Ed., Shanghai, in which salicylate of soda had been used with good effect.*

Shortly afterwards two cases offered themselves in which this treatment could be tried. In one, gonorrhœa was complicated by epididymitis and enlarged inguinal glands, in the other epididymitis alone. In both twenty-grain doses of the salicylate was given every two hours, with excellent effect, resulting in re-establishing the discharge, and relieving the complication. I did not make accurate observations as to pulse, etc., not having the opportunity of seeing the patients often. Five cases are not sufficient to allow positive statements, but they warrant further application at any rate.

Whether or not the effect will be the same in acute orchitis, I cannot tell. If not, we have another therapeutic resource, which is always available, and whose efficacy is undisputed. A diffuse inflammation of the seminal tubules and contiguous tissue, leads to the exudation of inflammatory lymph. If resolution takes place, the health of the testicle is not impaired; but if the exudation organizes with fibrous tissue, the subsequent contraction exerts a baneful influence upon the physiological function of the organ. In other words, atrophy and subsequent sterility results. The object of treatment should be to prevent this. Puncture of the testicle has been suggested, and its beneficial effect demonstrated. I have performed this little operation in fifteen cases, with invariable success. Two of these cases are sufficient to illustrate the practical excellence of the method.

Case 1. A bar-keeper, whilst under the influence of liquor, had a suspicious connection, which developed an intense attack of gonorrhœa. He consulted a physician, with the usual result of a four days' cure. Epididymitis with orchitis set in; the scrotum enlarged enormously, and in consulting a physician he was informed that he was suffering from hernia, which demanded immediate operation. By the advice of a friend, he consulted me; he came into my office supported by two others—his pain was intense, his anxiety great. I examined his scrotum, made a proper diagnosis, and advised puncture. He was placed on the operating-table, and twenty punctures with a very fine tenotome made. The relief was immediate, and he could walk home unaided. The next day he returned, and I then found that I had produced a good-sized hydrocele, which was readily removed by a trocar. No further treatment was necessary, and he made a rapid recovery.

Case 2. A traveler while East was attacked by mumps. Metastasis took place, resulting in a very painful enlargement of the left testicle. A

*"Use of Salicylate of Soda in Acute Orchitis, Complicating Gonorrhœa," p. 179, July, 1883.

number of physicians were consulted, but he grew rapidly worse. When he arrived in St. Louis he could go no further. I tried every plan known to me and the authorities I consulted, without beneficial influence. The same treatment as previously suggested was carried out, with excellent effect.

There is no doubt that the bacterium enthusiasm will be fruitful in producing one good result, namely: in modifying the strength and nature of some of the mixtures that are carried in vest pockets as sure cures for gonorrhœa. It has often been a wonder to me how some physicians can use such active astringents in gonorrhœa, when they would consider it the grossest ignorance if applied in acute ophthalmia. But it seems as if the merit of their treatment consisted chiefly in checking the discharge, and not in assuaging the cause of the inflammation. But medicine and surgery is full of such surprises, and a rapid diminution of them can only be produced by an intelligent acquaintance with histological anatomy and pathological processes.

NOTES FROM A COUNTRY PRACTICE.

BY J. J. CONNER, M. D.,

Of Palmer, Ill.

As it is said in Holmes's System of Surgery, in the article on fracture of the femur, that it was not yet determined whether muscular action was capable of breaking the thigh-bone or not, I wish to record that on the 18th day of August, 1883, I was hastily summoned to see Freddie Smith, a boy of eleven years of age, rather small of his age, who, the messenger said, had been wrestling with another boy about his own size, upon the platform of the W., St. L. and P. Railroad. I found the little fellow sitting upon the truck belonging to the depot, pale as ashes, holding his left thigh with his hands. I had the patient carefully laid down upon the edge of the platform, with the left side to the outer edge of the platform. In taking a position at his feet, standing a little way from him, I noticed that the toes of the left foot "turned out" considerably. I then took a position upon the ground beside the boy, and grasping the leg below the knee with the left hand, and the middle of the thigh with the right hand, the boy was easily brought toward me, as though a joint was in the thigh bone, and at the same time eliciting that characteristic dull th-rub, th-rub of crepitus.

He was gently picked up and placed in a spring wagon, and taken home, something less than a half-mile from the place of accident.

The boy was treated in the following manner, viz: A strip of adhesive plaster was put around the foot, extending from just below the knee on one side of the leg, and under the hollow of the foot, up the opposite side of the leg to a point corresponding to the first end, and well wrapped with a roller bandage. He was anesthetized with a mixture of ether, chloroform, and alcohol. The ends of the broken bone were nicely coaptated, and extension, by the hands of an assistant, kept up till it was well padded with cotton. Splints were applied, which consisted of one running on the outside of the body from the axilla to 3 or 4 inches below the foot, and a short one extending from the perineum along the inside of the leg, and also 3 or 4 inches below the foot. Five bandages were put around the splints, to keep them in place, viz: "one around the ankle, one below the knee, one just above the fracture," which was "at the junction of the middle and lower thirds, fracture line running from inner side of thigh obliquely upwards and outwards something like the distance of two inches," another around the waist, and another around the chest, under the arms. My idea in putting the bandages on in this manner was to immobilize the joint below the fracture, and the one just above it.

The patient was now put upon a canvas cot, and extension and counter-extension applied in the following manner. The foot of the cot was raised a little, and a piece of board was put across the foot by means of a couple of inch screws, and a pulley-wheel screwed fast upon the cross-piece, and a piece of whip-cord tied to the adhesive plaster, which was put on the leg and under the foot, and run over the pulley and made fast to a small dinner-bucket. A sufficient quantity of water was kept in this bucket to make the desired amount of weight to keep the leg extended. Swelling was at no time very great. The little fellow only needed two or three doses of opium to allay pain. He had perfect control of the bladder and bowels. His appetite was always good, and he put in his time reading books which I and some of the neighbors furnished him.

On the 16th of September the long splints and extension apparatus were removed, and short splints applied, which were of the Koehler adaptable material, made pliable by soaking in hot water for a short time. The limb was well padded with cotton, and the short splints well secured by the roller bandage. He was soon allowed to go around, as he felt disposed, by the aid of crutches. There is a little shortening of the injured limb. He is now attending the village school.

The history of this accident is as follows: The telegraph operator and his assistant were standing near by the little fellows when they were wrestling, and, as is too common, were encouraging the boys to do their best. A "snap" was heard by the operator and his assistant, and immediately following the "snapping sound," Freddie was seen to give way and his antagonist fell upon him. Freddie told me that he heard the sound, himself, of the breaking bone, *before* he fell to the floor. It may be of interest to note in closing that the right leg had been broken when the boy was only two years old, by another person kicking him while he was sleeping with them at the foot of the bed.

On October 12, 1882, a Mr. Tade brought to me his little daughter, about ten years old, with the following history, viz: Ten weeks before, the little girl, while playing at a neighbor's with another child, "ran something into her foot." It was thought to be a piece of glass, as nothing could be found to prove what it was. The mother said, however, that on the ground in front of the porch from which the little girl had jumped, a piece of umbrella wire stay was found. It was thought at the time that maybe the end of the umbrella wire had run into the foot, and being old and rusty, it had set up an inflammation which had lasted until the time of bringing her to me. On inspection of the left foot, a suppurating wound was seen on the ball of the foot, about an inch from the juncture of the second and third toes. A scar was seen which showed that the foreign substance had entered the foot directly between the two toes mentioned. The child was so nervous that it was necessary to anesthetize her, which was done with a mixture of ether, chloroform and alcohol, twenty-five minutes being consumed in bringing her under its influence. On examination with the probe, a grating sound was elicited, and I made bold to say, "Yes, it is a piece of glass, from the sound of the probe upon it." I could not remove the "glass" until I enlarged the opening, and then by seizing it with the dressing forceps, I pulled out a piece of old, rusty wire, nearly two inches long, which had been there ten weeks without producing lockjaw.

She was sent home, after having the foot well bathed in warm water, with a mixture of sweet oil, glycerine, and carbolic acid to dress the foot with, and she made a most excellent and rapid recovery.

The REPORTER speaking of needles being for a long time in the body circulating around, puts me in mind of a case of my own. About six and a

half years ago I was awakened one morning by my wife, who asked me to see if I could find anything in her breast that would account for the "sticking" she felt there. Upon examining the breast closely, the point of a needle was found protruding just through the skin. I took the dressing forceps, and pulled out a cambric needle, and she knows not when or how it got there. It was at perfect right-angles with the long axis of the body. She *thinks* now, after hearing of the other cases, that she must have swallowed the needle when a child, before she could remember the circumstances of the swallowing.

HOSPITAL REPORTS.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Mitral Disease.

The patient, M. D., is a little girl, age fourteen, born in the United States. Was admitted December 2. Her father was subject to frequent attacks of rheumatism. Her mother is still living, but has never had rheumatism. She has several brothers and sisters, none of whom are troubled with rheumatism. She had measles when a baby, but has never had scarlet fever. Two years ago she suffered from St. Vitus' dance. Last summer she had an attack of rheumatism in the joints, and she complained of pain and palpitations in the cardiac region. She was told by the physician who attended her, that she had a heart disease which had begun when she was four years old. Since then she has suffered from shortness of breath on slight exertion, and she has grown steadily weaker. So eight weeks ago she was received into the Holy Family, an institution on Second avenue, and she was cared for by the sisters there, and put to bed, and kept quiet. She lost her appetite soon after, and became troubled with nausea and vomiting, and she had frequent attacks of vertigo, and saw spots floating before her eyes, and the difficulty in breathing increased. She was therefore transferred to this hospital Dec. 2; and on her admission her pulse was 72, respiration 20, and temperature 100.2°. The urine was slightly albuminous, but contained no casts, and its specific gravity was 1015.

Gentlemen: This little girl, fourteen years old, gives a history of an inheritance of rheumatism from her father. But she does not appear to have had any attack until a few months ago, though her doctor says that she has had heart disease since she was four years old. As it is not common for pericarditis and endocarditis to occur otherwise than as secondary diseases, it is possible that we have not had a correct history of this case. Almost invariably they are secondary to one of the essential fevers, Bright's disease, or rheumatism. But with this little girl I am very confident that

the statement, that she had cardiac disease before this attack of rheumatism, is a correct one, because the hypertrophy and the other signs of an impeded circulation are so great, that they could not have occurred in the short period of time since last summer. There is another interesting point in her history, and that is that two years ago she had an attack of St. Vitus' dance. For this seems to corroborate the opinion which prevails, that chorea is especially likely to occur in children who have heart disease or rheumatic affections.

Palpation.—The apex beat can be felt at a point in a line with the nipple and in the seventh intercostal space, and the cardiac impulse transmits a distinct thrill to the hand.

Percussion.—The area of precordial dullness is increased, and the external limit, instead of being half an inch to the inside, as it should be, is half an inch to the outside of the nipple, showing hypertrophy and dilatation of the left ventricle.

Auscultation.—A very loud and confused murmur is heard at the apex, which so mingles with the normal heart sounds that it is difficult to determine its relation to them.

Gentlemen: We have all the ordinary symptoms of an extensive valvular lesion here. The murmur which many of you have just now heard, is also audible behind at the left of the spinal column, at the junction with it of the sixth, seventh, and eighth ribs. There is a very decided difference of opinion among you, as to the relation which this murmur bears to the normal heart sounds. Some of you heard it following the first sound, and therefore considered it to be a systolic murmur, indicating an insufficiency of the mitral valve, and a consequent regurgitation; and others of you heard it as a pre-systolic murmur, indicating a stenosis or roughness of the valves at the mitral orifice, and consider the murmur as produced by the rushing of the blood through this unnaturally-constricted opening. As I hear this murmur, it is pre-systolic and very loud, but upon more careful examination I think I hear a double murmur, and a softer bruit occurring with the ventricular systole, and following the contraction of the auricles, which is most distinct over the mitral orifice. I believe therefore that we have here both a mitral stenosis, and a mitral insufficiency which allows of a regurgitation of the blood through the orifice, which is not tightly closed by the valves.

Now, a word in regard to the diagnostic value of heart murmurs. Perhaps there is no more serious mistake made by the physician than that of attaching too much, and a false importance, to a cardiac murmur. For murmurs sometimes exist without there being any organic disease or defect in the heart. Thus there are so-called blood-murmurs, which are due to some variation in the specific gravity, or in the quality and quantity of the blood, or to its anæmic condition and a resulting relaxation of the muscles and valves of the heart. There are also temporary non-anæmic murmurs, due to a disturbance in the heart's action for a brief period only, and sometimes there are permanent murmurs with no apparent cause and with no other indications of cardiac disease. There is no other organ in the body about the integrity of which a man is so solicitous as the heart. And to tell a person that he has disease

of the heart, is a verdict which you should never pronounce without having substantial evidence of the correctness of your diagnosis. There is another symptom which is not so important as was formerly supposed, and that is the presence of albumen in the urine. A man was formerly supposed to be doomed if albumen, or casts, were at any time found in his urine. But now it is known that albumen in small quantities, and even casts, may be present temporarily when there is no disease of the kidneys. And certain medicines, and especially the iodide of potassium, will produce a temporary albuminuria. So you must always be careful to take all the essential conditions of a disease into consideration before making your diagnosis.

If you suspect a valvular disease, you should make a physical examination to determine if there is any hypertrophy of the heart in addition to the murmur, or any pulmonary congestion, or occasional congestion of the liver and abdominal viscera.

If you find that you get all the symptoms of an obstructed circulation, then you are sure of your diagnosis; but if you do not, then you should not attach too much importance to the mere presence of a murmur, and do not on any account show your suspicions to the patient. In this case we have a very great hypertrophy, though there is no pulmonary congestion at present. But no doubt if you were to examine into her habits, you would find that she takes great pains to avoid whatever would tend to cause pulmonary congestion. Patients who are liable to this condition, learn to move with great deliberation, and so they avoid the dyspnoea which would otherwise be caused by sending the blood to the heart more rapidly than it can dispose of it. Though the physical examination does not reveal any congestion in the lungs here, or any enlargement of the liver and spleen, and though there is not, and never has been, any swelling of the limbs, still we have evidence enough of a cardiac lesion in the presence of the great cardiac hypertrophy in conjunction with a loud murmur.

Another point to which I wish to call your attention is the fact that though this child is now fourteen, and she has had heart disease since she was four years old, yet she went on with no very serious inconvenience until last summer, when she had an attack of rheumatism, and since then she has not been so well. Now the explanation is, that in all such cases the heart compensates for the obstruction in the circulation by undergoing hypertrophy, so that the patient lives in comparative comfort for a considerable period. But at last there comes a time when this hypertrophy ceases to compensate. This may occur during an attack of illness, or as the result of some sudden muscular exertion, or the patient may have attained to that age in which a general degeneration of the vital tissues begins to take place; and it is well known that hypertrophied muscles as a rule degenerate earlier than healthy textures. As soon as the power of the degenerated heart muscle becomes insufficient to overcome the obstruction to the circulation, then begins a general disturbance of the vital functions, and it is often not till then that the assistance of the doctor is solicited.

Now, what is to be done for a patient in this

condition? This little girl comes here more feeble than she has been before; her circulation is rapid and feeble, and her strength is gone. She therefore needs rest first of all. And this is a cardinal principle in the treatment after there has been a failure of compensation—namely, to put the patient to bed, and to secure absolute rest. Many who come to this hospital are relieved by this means alone.

Dietetics form an important part of the treatment of these cases. It is important to give the lungs as free play as possible, for this gives great relief to the heart. It is, therefore, necessary to avoid many of those articles which are frequently included in the diet of the sick. You must discard all of the old traditions about a sick diet, which usually consists of gruel, farinaceous substances, fruits, and sweetmeats: for these things are especially harmful in such cases. These patients need such food as will not tend to undergo fermentation in the stomach and so produce gas, which by pushing the diaphragm upwards would diminish the expansibility of the lungs. They should be fed on animal food; and whisky, wines, beer, and all fermented liquors especially should be withheld. They should use nitrogenous foods principally, so as to avoid producing a gastric catarrh and increasing thus the dyspnoea.

But when the dyspnoea is great, and the congestion of the lungs is extreme, there are certain remedies which may be employed for the purpose of giving relief. Digitalis is a medicine which is especially useful in mitral disease, and it gives the greatest relief to the symptoms which result from this cardiac lesion. It is a perfectly safe remedy to use. It has been said that it increases the force of the heart, and this is what we want it to do in these cases. It also diminishes the frequency of the heart's action, that is, it increases the diastolic interval, and so allows the ventricle to become more completely filled and gives the heart muscle a larger amount of blood to contract upon; and this is also what we want here. But this is not so good a remedy to administer in aortic regurgitation, for here it may allow the heart to become over-filled so far that the diastole is not recovered from by the enfeebled muscle. Opium is a good substitute for digitalis in this class of cases, because it stimulates the force of the heart, while it does not diminish its frequency by increasing the diastolic interval so much.

This little girl is not taking any medicine, for she does not require any cardiac stimulant at present. Her heart is regular in action and not very frequent, though it is a little feeble; and she is not suffering from any distress, and her general condition is good. She is quite anæmic, however, as is often the case after an attack of acute inflammatory rheumatism.

Where repeated attacks of rheumatism occur in patients already affected with heart disease, there is another complication which you must look out for; and that is the setting up of a new endocarditis, which is apt to assume the ulcerative form and cause the deposit of new vegetations upon the valves. And these are therefore the cases in which we are apt to see the accident of an embolism occur.

Though, as I said, this patient does not need any heart stimulant, yet her anæmia and great

muscular weakness call for treatment. So for this she is taking an effervescent mixture containing iron, and she is kept upon milk and animal food. She will probably improve steadily, and then will be comparatively comfortable for a considerable period. But her next attack of illness will probably bring her again into this condition; or after twenty or thirty years, according to her habits of living, there will finally be heart failure, and the resulting congestions of the viscera, and the other difficulties which are wont to attend an obstructed circulation. Let us hope that that day will be far off.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Downward Displacement of the Transverse Colon. Three Cases, with Autopsies.

BY CHARLES HERMON THOMAS, M. D.,
Surgeon to the Philadelphia Hospital.

[Read October 17, 1883.]

A deformity of the transverse colon, consisting in the elongation of that portion of the large intestine and its displacement downward in the form of a loop or festoon, has been observed by me in three instances in private practice. Autopsies were had in them all. In the first the most dependent portion of the gut was found midway between the umbilicus and the pubic symphysis; in the second it was deeply impacted in the cavity of the pelvis; and in the third it reached the level of the umbilicus.

A positive diagnosis was not made in any of the cases, although in two of them the striking clinical conditions present were studied with special care in association with experienced and highly skilled observers. In the second in order of occurrence, the relationship between it and the preceding one suddenly occurred to my mind, and was communicated to the operator while on our way to make the post-mortem examination. In the third case the actual condition present was strongly suspected before death. So that in both of these latter special precaution was used at the autopsies to avoid disturbing the relative position of the abdominal viscera until their location had been accurately determined.

The lesion here described seems to be of rare occurrence. Thus far I have failed to discover a single recorded case; and not until this paper was nearly completed was I able to find any published reference to the condition, however vague. Several months ago I asked the assistance of Dr. Formad, who informed me that in a series of autopsies, numbering over 2,000, which he had made, he had not observed an instance of like character. He has also kindly sent me the following note:

"UNIVERSITY OF PENNSYLVANIA, Dec. 15, 1883.

"DEAR DR. THOMAS:

"* * * I looked very thoroughly through the literature of intestinal lesions, but did not meet any record of misplacement of the transverse colon.

Very truly yours,

"H. F. FORMAD."

Case 1. Male, æt. eighty years, a retired gentleman, came under my care August, 1874, as a patient of Dr. J. J. Levick, who had placed his practice in my charge during his vacation, and who informs me that there was no previous history of abdominal disease.

The symptoms present were extreme emaciation, feebleness, anorexia, and a profuse but fitful diarrhœa. The abdomen was retracted and somewhat tender upon pressure. There was no complaint of pain except at intervals of three or four hours when the diarrhœa had ceased for a time. Coincidentally with the cessation of the diarrhœa, a tumor about five inches long and two inches wide, of firm consistency, and visible on inspection, appeared beneath the thinned abdominal walls in a transverse position midway beneath the umbilicus and the symphysis pubis. The tumor persisted but an hour or so at a time, disappearing immediately upon the return of the diarrhœa. During the periods of continuance of the tumor the pain was so severe as to rapidly weaken the patient. This condition of alternate flux and painful tumefaction was repeated several times daily until death took place. During the attendance upon the case there were associated with me Dr. Albert H. Smith and a distinguished physician from another city—a near relative of the patient. With attention fully directed toward it, and after repeated observations, we were unable to frame a reasonable hypothesis as to the exact character and origin of the tumor. Death occurred September 12, about three weeks from date of attack.

Autopsy.—In the presence of Dr. Levick and the relative mentioned, I made the abdominal section. To the former I am especially indebted for the specimen obtained, and which is still preserved. Upon laying open the abdominal cavity the transverse colon was found to be greatly elongated and proportionately narrowed, the loculi being nearly obliterated, forming a loop open at the top similar to the letter U, the most dependent portion occupying the position of and constituting the tumor as above described, *i. e.*, the horizontal portion of the loop rested upon the small intestines, midway between the umbilicus and the pubic symphysis.

Case 2. Female, æt. fifty-four years, a lady of delicate frame and refined habits of life, was under my charge for about ten months prior to her decease. During the greater portion of this period Dr. James H. Hutchinson was associated with me in the attendance. Dr. Chas. K. Mills also saw her for me during my vacation. The patient had previously been attended by a homœopathic practitioner who had diagnosed her condition as enlargement of the liver and stricture of the rectum. The latter supposed condition he had treated by the introduction of rectal bougies; this practice being afterward abandoned on account of the pain produced, and the lack of beneficial results.

Profound cerebrastrhenia from other causes, with several months of delirium, and which finally led to a fatal result, serving greatly to complicate the issues involved. The abdominal conditions which had been recognized from the beginning were thus either masked or placed entirely in abeyance during much of the time.

The more prominent symptoms recognized were (1) pain, referred chiefly to the region of the liver

and extending both upward and downward, which pain was aggravated by walking, and was described as of a dragging, tearing character, and which had existed for four years or more. It was very much relieved by the recumbent posture, and after some months spent mostly in bed almost entirely vanished.

(2) Obstinate constipation, with indications of obstruction, even a liquid passage being voided with difficulty. The capacity of the rectum to retain enemata was also diminished to two ounces.

(3) Two solid tumors, elongated in form and of the consistency of solid faeces, were discovered, located one on each side of the abdomen, and evidently just beneath the parietal structures. They were vertical in position, and about eight inches distant from and so parallel to each other, and were traced from the border of the ribs to within about two inches of the pelvic brim. This condition was observed but a few times, and at considerable intervals; at other times it was absent. The hypothesis was adopted that these masses were the ascending and descending colon, respectively, in a state of fecal impaction.

Death occurred March 30, 1882, supervening upon a severe mental shock. An autopsy was made by Dr. Wm. M. Gray two days later, Dr. Hutchinson and myself being present. To quote from Dr. Gray's notes: "Upon opening the abdomen found complete prolapse of the transverse colon. It was carried beneath the pubis and rested on the bladder. The large intestine was much narrowed, and filled throughout with hard nodulated faeces; the meso-colon was absent and the omentum, which was free from fat, was extremely atrophied; the rectum was normal, showing no evidence of stricture; the liver was of normal size, but upon microscopic examination showed marked cirrhosis."

Thus, that which had appeared to be the ascending colon proved to be the descending limb of the displaced transverse colon; and that which had seemed to be the descending colon was shown to be the ascending limb of the same malformation.

The pain which had previously been felt in the region of the liver, and which had been relieved by recumbency, had manifestly been caused by the sharp flexure of the colon contiguous to it; and the rectal obstruction by the crowded condition of the pelvis produced by the invading loop of large intestine.

Case 3. Male, æt. thirty years, a tailor's cutter, under attendance nine days prior to decease. The subject of advanced Bright's disease, with "hyaline, epithelial and granular tube casts, also mucous cells, compound granule cells, and free oil globules," he was extremely exhausted thereby. He also complained of severe pain in the abdomen to the right of and slightly above the level of the umbilicus. Upon inspection and palpation of the part no enlargement or induration was discovered; but light percussion developed an intensely tympanic sound, confined to the region described. Misplacement of the transverse colon was suspected, and the region kept under observation for any evidences of fecal impaction which might, but which did not, present. Death occurred suddenly March 19, 1883. Autopsy two days later, by Dr. Wm. M. Gray, operator, Dr. Wm. H. Burke and myself being present.

The following notes were made by Dr. Burke.
 * * * "Body rather emaciated, and showing signs of commencing decomposition. On opening abdomen, absence of fat noted, omentum normal. Peritoneum showing traces of lymph and pus, in the pelvic region especially, but no general inflammation. Transverse colon empty, distended with gas, and has a sharp flexure at its centre, bending obliquely downward and toward the right, to the level of the umbilicus, thence sharply upward to its normal position. Meso-colon intact and apparently normal, except in length. No sign of fecal obstruction at the point of flexure. Both kidneys cirrhotic; capsule adherent, and secreting structure destroyed."

Evidently the heightened tympany localized near the umbilicus, which had been previously recognized and ascribed to the presence there of a portion of the transverse colon misplaced, had in reality been so caused.

No adhesions of the displaced parts were found in any of the cases cited. The intestinal fault was probably not the cause of death in any of them. Taking them together, it will be seen that clinical conditions and post-mortem appearances agree in at least one important particular, viz.: the location of the displaced intestine in contact with the anterior abdominal wall and below its normal site.

The normal anatomical relations of the colon have a special significance in the light of these cases, from a diagnostic point of view. The ascending and descending portions of the colon are, normally, to be found in contact with the *posterior* or lumbar wall of the abdominal cavity—behind the small intestines—and are there bound closely down by reflections of the peritoneum. The transverse colon, on the contrary, is normally in contact with the *anterior* abdominal wall—in front of the small intestines—where it is loosely suspended by the transverse meso-colon, a structure of considerable length.

It therefore appears to be a practical impossibility for the vertical portions of the large intestine to become spontaneously misplaced anteriorly. But of the transverse colon, its displacement downwards—in which changed position its relation of contact with the anterior abdominal wall is retained—these cases show to be a condition of repeated occurrence.

Conclusions.—(1) Displacement of the transverse colon downward within the abdomen may be to any degree, partial or complete.

(2) Such displacement will present as solid tumor if the bowel be in a state of fecal impaction, or as a limited area of heightened resonance if the bowel be distended with gas; but in either case the displaced part is to be found in contact with the anterior abdominal wall.

(3) The occurrence of intra-abdominal tumor situated below the normal site of the transverse colon, and having the same general configuration as the colon, such tumor being of a certain consistency, and presenting evidences of being in contact with the anterior abdominal wall; or the occurrence of areas of special tympany with like outlines and similarly located, constitute diagnostic signs strongly indicative of downward displacement of the transverse colon.

Some New Facts about Astigmatism.

Read December 12, 1883, by M. Landesberg, M. D.

Astigmatism is such an abstruse subject, that it should generally only be treated before the narrower circle of physicians who have made ophthalmology a special study. And if I beg leave to lay before you the results of my observations in regular astigmatism, there must be some special reason which induces me to make exception to the rule. The results of my observations open a new insight into the nature of astigmatism; they mark a real progress in the knowledge of the latter, and furnish practical consequences, which may be utilized for the benefit of all those who are suffering from a similar trouble.

You know, gentlemen, that by astigmatism we understand that form of asymmetry of the cornea, in which the curvature of the latter is either different in the different segments of the same meridian, or in the different meridional planes. The first form is called *irregular*, the latter *regular astigmatism*. Irregular astigmatism may be either acquired or congenital. It is very often associated with irregularities of curvature in the lens, and but very seldom admits of any remedial help or of correction by glasses.

It has been the scientific dogma of our days that regular astigmatism presents, in the greater majority of cases, a congenital and unchangeable optical defect of the cornea, which can only be neutralized by the selection of suitable glasses. The development of regular astigmatism, *post-partum*, is considered to be of very rare occurrence, and to take place only in consequence of certain affections of the cornea, by spasm of the lids, and occasionally after iridectomy and extraction of cataract. In these instances, however, astigmatism is temporary only, and it generally subsides when the causal affection, which had produced the changes in the curvature of the cornea, has been removed.

My observations in regular astigmatism are in full contradiction to the prevalent opinion concerning the nature of this form of error of refraction. They have taught me that, certain conditions given, regular astigmatism may develop in any cornea; that it is apt to progress and increase in degree, when the primary cause of which astigmatism is only the effect—one of the many symptoms only of the morbid process, in which the eye actually is involved—continues to work. If you have such a case in hand, and you correct the optical effect by cylindrical glasses, you only add a new injury to the existing ones; you only aggravate the morbid process; you consolidate a disorder which is apt to be cured by appropriate treatment.

The conditions under which regular astigmatism may develop are: *Progressive myopia, with and without spasm of accommodation—spasm of accommodation in an emmetropic, myopic, and hyperopic eye.*

In my first communication on this subject in "Von Graefe's Archives of Ophthalmology," xxvii. 2, I gave the history of fourteen cases which came under my treatment, either for progressive myopia with and without spasm of accommodation, or for the most various asthenopic troubles, based upon spasm of the ciliary muscle, in

connection with myopia or hyperopia. All these cases were complicated with regular astigmatism. The degree of the latter varied from 1.36 to 1.10. An increase in the degree of astigmatism was observed in two cases of progressive myopia, in connection with the progress of the latter. The treatment instituted for the asthenopic disorders, or for the progressive myopia, had the effect not only to cure the affection proper, but also to remove astigmatism entirely. The degree of astigmatism gradually subsided, keeping pace with the decrease of the other morbid symptoms.

I am now able to corroborate my first statements by additional facts. The latter are based upon a further observation of thirteen cases, in which the *transitory character of certain instances of regular astigmatism* has been fully established.

I shall not be guilty of wearying the audience by a monotonous exposition of all these cases, however interesting they may be. A brief summary of three cases will suffice to illustrate my proposition:

Case 1. The twelve-year-old boy McE. came under my treatment October 26, 1882, on account of weakness of his eyesight, which had rendered regular work impossible. He has been suffering for the last few years from violent headaches, with which were lately associated noises in the ears. He had stammered before, but slightly and occasionally only. This disorder has now become permanent for the last few months. There were marked anæmia and nervousness; the eyelids were in constant nictitation; the external appearance of the eyes was normal; all the other organs were in good condition.

Vision of the right eye was $\frac{1}{10}$; concave $\frac{1}{2}$ increased vision to $\frac{1}{5}$; concave $\frac{1}{2}$, combined with concave cylindrical $\frac{1}{8}$, 65°, brought vision almost to $\frac{1}{2}$. Vision of the left eye was $\frac{1}{10}$; concave $\frac{1}{2}$ increased vision to $\frac{1}{5}$; concave $\frac{1}{2}$, combined with concave cylindrical $\frac{1}{8}$, 105°, brought vision to $\frac{1}{2}$. There were besides weakness of the internal muscles and marked venous hyperæmia of the retina. The boy was not able to continue reading for a few moments, not even medium large print. He turned the book soon to the right, soon to the left side, raised and lowered it, and seemed to feel easiest by holding it in an oblique position to his visual line, the head turned on the vertical axis to the left. The eyelids, which were in constant nictitation, closed spasmodically on protracted efforts of accommodation, which had besides the effect to call forth lachrymation and congestion of the ocular conjunctiva, with a sensation of intense pain and pressure in the forehead and in the temples. Photophobia was not present, and the eye could stand even strong light with great ease.

I abstained from any internal medication, however tempting it was to try to build up the system by roborantia. My treatment consisted merely in absolute rest of the eyes and in the use of duboisia, by which maximal mydriasis was kept up. With the abatement of the spasm of accommodation, which was marked by a decrease in the degree of myopia and astigmatism, and by an increase in vision, the general health improved, headaches and nervousness subsided, and stammering returned to its former condition.

The final result of the treatment, as noted down January 12, 1883, was as follows: Vision of the

right eye $\frac{1}{2}$; concave $\frac{1}{2}$ increases vision to $\frac{1}{2}$. Vision of the left eye $\frac{1}{2}$; concave $\frac{1}{2}$ increases vision to $\frac{1}{2}$. No astigmatism in either eye. The weakest cylindrical glasses at my disposal, concave $\frac{1}{10}$, impair vision. Equilibrium of the muscles perfectly restored. Retina normal.

Examination repeated June 2, showed no change in the condition of the eyes; the latter have done their due amount of work without ever causing the slightest annoyance.

Case 2. The 10 year old boy B., came under my treatment October 2, 1878, for progressive myopia and asthenopic trouble, with the following condition of his eyes: Right eye, M. $\frac{1}{16}$, V. $\frac{1}{10}$; concave $\frac{1}{8}$, combined with concave cylindrical $\frac{1}{8}$, 95°, increases vision to $\frac{1}{5}$. Left eye, M. $\frac{1}{16}$, V. $\frac{1}{10}$; concave $\frac{1}{8}$, combined with concave cylindrical $\frac{1}{8}$, 105°, increases vision to $\frac{1}{5}$. The parents of the boy are highly myopic, and there is myopia in the respective families.

A three months' treatment by means of heurteloups and atropia had the effect to increase vision to $\frac{1}{5}$ in each eye, and to remove myopia and astigmatism. In spite of the many hurtful influences to which his eyes were subjected, the latter gave no cause of complaint until the fall of 1882, when symptoms of asthenopic troubles and of irritation developed in conjunction with the reappearance of myopia. Examination made December 4, revealed: Right eye, vision $\frac{1}{5}$, with concave $\frac{1}{8}$, V. $\frac{1}{5}$, combined with concave cylindrical $\frac{1}{8}$, 90°, V. $\frac{1}{5}$. Left eye, V. $\frac{1}{10}$, with concave $\frac{1}{8}$ respectively $\frac{1}{5}$, V. $\frac{1}{5}$, combined with concave cylindrical $\frac{1}{8}$, 90°, V. $\frac{1}{5}$.

A two weeks' use of duboisia and perfect rest of the eyes improved somewhat the condition, but treatment proper had to be deferred until the summer vacation. June 25, 1883, examination showed: Vision of the right eye $\frac{1}{5}$, concave $\frac{1}{8}$ increases vision to $\frac{1}{5}$; concave $\frac{1}{8}$, combined with concave cylindrical $\frac{1}{8}$, 125°, increases vision to almost $\frac{1}{2}$. Vision of the left eye $\frac{1}{10}$, concave $\frac{1}{2}$ increases vision to $\frac{1}{5}$; concave $\frac{1}{2}$, combined with concave cylindrical $\frac{1}{8}$, 105°, increases vision to $\frac{1}{2}$. Weakness of the internal muscles, marked retinal hyperæmia. Region around the macula lutea slightly suffused.

The use of duboisia and heurteloups, and perfect rest of the eyes, gradually led to perfect recovery. The final result, noted October 3, was: Right eye, V. $\frac{1}{2}$; it bears concave $\frac{1}{10}$, but not concave $\frac{1}{8}$. Left eye, V. $\frac{1}{2}$, concave $\frac{1}{8}$, resp. $\frac{1}{5}$, increases vision to $\frac{1}{2}$. With both eyes (without the use of concave glasses), vision is $\frac{1}{2}$. Astigmatism entirely vanished. Equilibrium of muscles restored. Retina normal.

Case 3. The 14 year old boy, W., was brought to me December 27, 1882, on account of asthenopic troubles and weakness of his eyes. Examination showed: Vision of the right eye $\frac{1}{5}$, convex $\frac{1}{10}$ up to $\frac{1}{2}$, increases vision to $\frac{1}{2}$. Vision of left eye, $\frac{1}{10}$; convex $\frac{1}{10}$ up to $\frac{1}{2}$, increases vision to $\frac{1}{2}$. Cylindrical glasses do not improve vision. There is marked spasm of accommodation.

My proposed course of treatment was not agreed to at the time. The boy continued working until March, 1883, when his eyes failed totally. He resorted to another oculist, who ordered him the following glasses for near work: Concave $\frac{1}{10}$, combined with concave cyl. $\frac{1}{8}$, 120°, and prism 2°, base

inward for each eye. They acted at first like a charm, and patient was able to continue his studies for a few weeks, but then the condition changed to the worse. A modification in the glasses—concave $\frac{1}{30}$, combined with concave cyl. $\frac{1}{8}$, 120°, and prism 3°, base inward for each eye—ordered by the same physician, proved without avail. The slightest effort of accommodation provoked the most agonizing headaches, nausea, and even vomiting; vision became as bad for distant as for near objects; the general health suffered considerably. Patient lost flesh and appetite, and became of very irritable temper. In this condition he was entrusted to my care, June 28, after a treatment for dyspepsia had proved a total failure.

The examination showed: Vision of the right eye $\frac{1}{20}$; concave $\frac{1}{30}$ increases vision to $\frac{1}{10}$; concave $\frac{1}{20}$, combined with concave cylindrical $\frac{1}{20}$, 105°, gives vision $\frac{1}{10}$. Vision of the left eye $\frac{1}{60}$;

concave $\frac{1}{18}$, resp. $\frac{1}{18}$ increases vision to $\frac{1}{10}$; concave $\frac{1}{18}$, combined with concave cyl. $\frac{1}{30}$, 110°, gives vision $\frac{1}{10}$. Medium small print (Jaeger 3) is read with great effort, the book being kept close to the eyes, and askant to the visual line, the head turned on the vertical axis somewhat to the left. The lids are in constant nictitation with intervening spasmodical contractions. There is marked lachrymation and photophobia. Both retinae show intense venous congestion.

The same treatment as has been described in the second case, gave, October 2, the following result: Right eye, vision $\frac{1}{10}$; left eye, vision almost $\frac{1}{8}$. Both eyes bear convex $\frac{1}{60}$, but not a higher number. With both eyes (without the use of glasses), vision is $\frac{1}{8}$. With the help of convex $\frac{1}{60}$, vision reaches almost $\frac{1}{2}$. No trace of astigmatism. All disorders vanished. General health good.

EDITORIAL DEPARTMENT.

PERISCOPE.

Recent Advances in Neuro-Pathology.

The *Med. Times and Gaz.*, December 15, 1883, says: It is not many years since a definite and constant lesion was recognized in the outer part of the posterior columns of the spinal cord in cases of locomotor ataxy; and, in consequence of the general acceptance of this view as to its pathology, the name of *tabes dorsalis* has been gradually superseding the other. Recent investigations, however, have tended to raise doubt as to whether a central lesion is the one and only cause of the symptoms in this disorder. Prof. Pierret was the first to sound a note of warning when he demonstrated, at the International Medical Congress in 1881, peripheral in addition to central lesions in a case of locomotor ataxy; and in a recent number of a contemporary Mr. Page has asked point-blank whether *tabes dorsalis* may not have a peripheral origin. The patient who seems to have been, so to speak, the starting-point of this latter paper, was an old soldier, who came under observation suffering from locomotor ataxy and arthropathy, and who had suffered previously on separate occasions from perforating ulcer of each foot; and Mr. Page puts forward the hypothesis that the corn which preceded the perforating ulcer set up a peripheral neuritis which ultimately led to ordinary locomotor ataxy. The fact, however, that each great toe was affected with a perforating ulcer is much more compatible with the theory of an already existing central affection than with any other; but even if the perforating ulcer had been unilateral, it would not have formed a strong argument in support of Mr. Page's plea. Gastric crises often precede the more common symptoms of locomotor ataxy by a great many years, but no one would seriously argue that the stomach formed the starting-point of a neuritis which ultimately

led to the development of locomotor ataxy. An affirmative answer to Mr. Page's question can only be supplied by pathology. No amount of clinical study can afford convincing proof on this point. Two things are necessary for the satisfactory solution of the problem: it should be shown, first, that it is possible for peripheral neuritis to occur spontaneously; and next, that when it does so originate it is capable of giving rise to the symptoms of locomotor ataxy.

A contribution towards the elucidation of the former requirement has recently been furnished by MM. Pitres and Vaillard, who, in a series of valuable papers in the *Archives de Neurologie*, have put forward their views on the nature of peripheral neuritis not due to traumatic lesion. The subject is, comparatively speaking, a new one. Several causes have contributed to this—one of these being the general belief that a neuritis could not originate independently of any primary change in the spinal cord, or ganglia on the posterior roots; another being the imperfect methods which, up to a very few years ago, were employed in examining the nerves. Their papers are based on the careful study of nine cases in which peripheral neuritis existed, not originating in an injury. Three of these were cases of cerebral hemorrhage, two were cases of locomotor ataxy, two of Pott's disease, one of double herpes zoster, and one of leucocythæmia. In none of the cases was any alteration in the nerves perceptible to the naked eye. They were of normal color, and were neither softened, indurated, reddened, nor cedematous. The microscope alone enabled the authors to detect any alterations. The changes closely resemble those found in the peripheral portion of a divided nerve. In both instances there is at first swelling of the nucleus of the nerve-fibres, and segmentation of the myelin, advancing to complete destruction of the cylinder-axis and of the path of Schwann; in both instances,

too the destroyed fibres may be regenerated, or at any rate may be replaced by newly-formed ones. But though the processes present these analogies, it must not thereby be assumed that they are identical. The form of neuritis under consideration has not the regular, uniform evolution observed in "Wallerian" degeneration; sometimes it runs a very rapid course, at others a very slow one. There is also some evidence that spontaneous neuritis may be propagated towards the central parts, which does not occur after division of the nerve. The changes affect exclusively, at the onset at any rate, the nerve-fibres themselves, the connective tissue remaining normal during a comparatively long period, and only becoming thickened when the nerve-tubes are already deeply involved. Even in cases where the neuritis appeared to be associated with primary changes in the nerve-centres, the authors did not find the changes continuous between the spinal cord and the affected nerves; the nerve-trunks in the intervening portions often appear to be quite healthy. All peripheral nerve inflammations do not give rise to appreciable nutritive or sensory disturbances; these probably only occur when the proportion of affected fibres is somewhat considerable. They vary in their nature according to the function of the affected nerve and the degree of the change. Amongst the affections resulting from peripheral neuritis, described in this paper, are eschars of rapid formation, ulcers with no tendency to heal, vesicular herpetic eruptions or pemphigoid bullæ, perforating disease of the foot, chronic œdema, arthropathy, and malnutrition of the nails. Local anaesthesia was not constantly present. From a pathological point of view the authors make five distinct types:

1. Fragmentation of the myelin into masses.
2. Fragmentation of the myelin into balls.
3. Fragmentation of the myelin into fine granulations.
4. Atrophy of the tubes, with amber-colored granulations in the interior of the path of Schwann.
5. Complete atrophy of the nerve-tubes.

The second requirement—namely, that it should be shown that the symptoms of locomotor ataxy can be produced by a peripheral lesion—has quite recently been fulfilled by M. Dejerine, who, in a short communication to the *Gazette Médicale de Paris* (No. 44), gives an account of two cases which during life presented certain characteristic symptoms of locomotor ataxy—*e. g.*, marked incoördination, anaesthesia, and analgesia of legs, and loss of the patellar tendon reflex—and in which, after death, the spinal cord was found to be perfectly normal, whilst the peripheral nerves presented a high degree of neuritis. No indication is given as to the duration of the disease in either of these cases, and it seems fair to suppose that, had the disease lasted longer, the spinal cord might perhaps have been found to be involved. This, however, is not M. Dejerine's opinion, as he proposes to group his cases apart from the ordinary disease, calling them peripheral tabes, in opposition to the spinal disease. If, however, a differential diagnosis can only be made by the aid of the microscope after elaborate chemical processes have been followed out, it is a distinction that is hardly worth making, and it

will be more rational to admit that locomotor ataxy may be due to a peripheral lesion.

The Treatment of Violent Delirium in Fever Cases.

Dr. James W. Allan thus writes in the *Lancet*, December 15, 1883:

The management of violent delirium constitutes one of the most difficult tasks of those having the charge of fever cases. The following remarks are meant to apply to typhus and enteric, and to severe attacks of delirium in these diseases.

Mild muttering delirium clearly does not call for active treatment; it is best met by such gentle measures as shaving the head, applying evaporating lotions to the scalp, sponging the skin with lukewarm water and vinegar, etc. Even that form of delirium, common in typhus, in which the patient insists on getting out of bed to go to his work, etc., may generally be controlled easily by a skillful nurse, who has only to use persuasion and gentle restraint to keep the patient in order. Sometimes such cases insist on sitting on a chair by the fire or going round the ward on a tour of inspection, and I have known an old and experienced nurse gratify these whims with the best possible result. The patient gladly returns to bed after the exertion, feeling tired in body but satisfied in mind, and frequently falls into a refreshing sleep. Of course such liberties could be accorded in certain cases only, and under the personal supervision of an old experienced nurse. The cases which are difficult of management are those in which the delirium assumes a wild or fierce character. The worst cases of all are those in which there is pulmonary complication. When a muscular young man is seized with violent delirium at an early stage of illness, before his strength has been seriously impaired, great trouble is usually in store for those in charge. As a rule, the patient is in a state of terror or apprehension. He thinks that he is in danger of being murdered, or he believes that he is about to be consigned to hell fire. He is simply desperate, and this constitutes the great danger of the case. Sometimes he is cunningly planning his escape. At this stage he must be closely watched. There is a peculiar look about the eye, not easily described, but once seen readily recognized again. There is also change of manner, questions are answered abruptly, or an obstinate silence is maintained. The man is in a dangerous state; a violent attack may occur at any moment. Every trivial action, every careless word of the attendants, has for him a sinister meaning. Without warning he may spring from the bed and dash through a window. The probability is that the patient has not slept for some time, and recognizing his dangerous condition, the medical attendant is naturally anxious to administer a draught, so as to secure deep, refreshing slumber. But, to his great annoyance, the patient absolutely and doggedly refuses to swallow a drop, and for the very good reason that he believes an attempt is being made to poison him. This reminds one of the notions of the insane; and there can be no doubt that the delirious patient is temporarily insane. It may be that the attempts to get him to swallow the draught have roused the man to active resistance, and his violence may be so extreme as to ne-

cessitate the help of several persons and the application of mechanical restraint. The latter should never be resorted to when it can possibly be avoided; but when it must be employed, let it be done quickly and effectively. Plenty of help should be obtained, for if the patient is strong, and one or two persons try to put him under restraint, the result may be a severe and prolonged struggle between the patient and attendants—an exasperating kind of exertion, which is bad for all concerned. The patient should be gently, but firmly, overpowered, when, as a rule, feeling helpless, he will submit. The “jacket” and “sheet” should then be employed, great care being taken to make sure that the long sleeves of the jacket are bound firmly round the patient’s wrists, otherwise he will withdraw his hands and soon set himself free. When the jacket and sheet have been properly adjusted the patient is secure, but it is not desirable that he should be kept tied up a minute longer than is necessary. If he still refuses to swallow the draught, what is to be done? A hypodermic injection of morphia might be given, but I confess to a prejudice against this practice in fever cases, from a fear of causing local irritation, boils, etc., and, besides, the pain inflicted by the thrust of the needle, though slight, would confirm the patient in his belief that he was in the hands of the enemy.

I find the following method to work well: Morphia suppositories are administered till the patient becomes quiet and drowsy. He is then manageable. The jacket and sheet can be removed, and warm dry flannels, etc., put on. The probability is that he can now be got to take a draught, or at least to swallow passively. If he still refuses, morphia suppositories can be administered as required. As to the nature of the draught, I may state that I adhere to the hydrate of chloral, long ago tried and recommended by Dr. James B. Russell in the treatment of fever cases. When there is simply insomnia, twenty or twenty-five grains of chloral hydrate in syrup (repeated, if necessary, in an hour) generally secures good sleep for an adult. When, however, there is violent delirium, the addition of five or ten minims of solution of muriate of morphia causes the end in view to be more rapidly and effectually attained. But this combination of chloral and morphia is well known to be a formidable one; it requires to be carefully administered, and the effects must be closely watched. When the narcotics require to be given for a long time on account of persistent delirium, it is convenient to prescribe a mixture, each dose of which contains ten grains of chloral and five or ten minims of solution of muriate of morphia, the interval between the doses being determined by the effect produced. Respiratory embarrassments, lividity of nails, etc., are serious contra-indications to the use of narcotics. When suppositories and draughts have both been given in a case, this should be well borne in mind so as to estimate the combined effect. In the treatment of violent delirium in fever, narcotics wisely given may save life; improperly given, they may hasten, or even directly cause, death. In prescribing them, no routine practice can be adopted, and their administration demands the most careful personal supervision of the physician in attendance.

Syphilitic Stenosis of the Œsophagus.

We take the following from the *Med. Times and Gaz.*, December 15, 1883:

Syphilitic disease of the œsophagus is rare, or, at any rate, very little attention has been given to it. In a paper in the *Berliner Klinische Wochenschrift*, No. 33, Dr. Lublinski relates two cases which occurred in his practice.

The first occurred in a man twenty-nine years of age, who came under observation in November, 1880, complaining of difficulty in swallowing solid food. This symptom had existed three weeks, and was getting worse. There was no history of his having swallowed any corrosive, and there was no evidence of pressure on the œsophagus from any tumor in the neck or mediastinum. On the uvula there was a scar, but otherwise the pharynx and the œsophagus (so much as was visible) were healthy. The larynx was movable, and not diseased. A medium-sized sound was passed without difficulty to the level of the sixth dorsal vertebra, where it met with an insuperable obstruction. A small-sized bougie could be passed through the stricture, which communicated to the hand a feeling of roughness. There was a distinct history of syphilis, ten years before. The patient was treated with iodide of potassium, and bougies were not used. At the end of eight days there was no improvement, and the patient was suffering from palmar psoriasis. The iodide was increased to thirty grains daily. At the end of three weeks there was marked improvement; the sound could be passed, though with some difficulty; and the patient could swallow solid food, though he experienced a sensation of soreness and pressure behind the sternum when the food was too solid. In the course of some weeks, under treatment with iodide, these symptoms quite disappeared, and a sound could be passed without difficulty. The patient was apparently cured in March, 1881.

The second case was a man aged fifty-four, who came under treatment for an affection of the tongue, and pain in swallowing, in November, 1881. For eight weeks he had been unable to swallow anything but liquid and soft food, and the latter gave him pain between the shoulders and behind the sternum. On the left side of the tongue, near the tip, was a hard ulcerated tumor the size of a bean; the edges of the ulcer were sinuous and considerably thickened, and around the ulcer was a red areola. The tumor was said to have been growing gradually and painlessly until fourteen days before, when it began to ulcerate. The glands about the jaw were a little swollen; the pharynx and larynx were healthy. At the level of the fifth cervical vertebra the œsophageal sound met with an obstruction, which only permitted a fine bougie to pass. The patient showed no other signs of disease. He had been infected with syphilis twenty-two years before, for which he had been treated, and during the subsequent years he had had occasional signs of the disease. Under treatment with iodide of potassium the tumor in the tongue diminished, lost its hardness, and healed, leaving a puckered scar. The œsophageal stricture was treated by the daily passage of bougies, at first with little benefit; but, as the iodide was pushed up to forty-five grains daily, an improvement gradually occurred, pains diminished,

and the patient was able to swallow solid food. The improvement continued, though in July, 1882, there was still some obstruction to a large sound, probably due to the contraction of the scar left by the syphilitic disease. Besides these two cases, Lublinski mentions several other cases.

Lublinski is of opinion that this affection of the œsophagus occurs in the later stages of syphilis, years after infection, when the patient seems to be cured. Most of the cases begin as a gummatous deposit in the submucous tissue. This deposit may undergo one of two changes—either, under proper treatment, it undergoes fatty metamorphosis and is absorbed; or the cell-proliferation continues, the intercellular substance softens and becomes gelatinous, and the mass becomes puriform, and at length ulcerates. The ulcer, in the process of healing, forms a thick scar, which has a further tendency to contract, and narrow the canal. In some cases the walls of the œsophagus may be at last converted into firm fibrous tissue, which may occupy the whole thickness, and may extend over a greater part of the surface of the canal. When the deposit undergoes fatty metamorphosis and is absorbed, no permanent stricture is produced; but when ulceration has occurred with the formation of scars, the stricture may improve, but will never be cured. As to the rarity of this affection, Lublinski suggests that the reason may be in the protection afforded by the thick stratified squamous epithelium which covers the mucous membrane of the œsophagus, and protects it from external influences; or that slight affections may be frequently overlooked both in the living patient and at autopsies, the symptoms being frequently so slight, and physical examination in the living almost impossible, so that the early stages of this disease may be overlooked; and the disease may really be more common than it is generally admitted to be.

A Case of Chromidrosis.

Dr. F. Duffy reports this case in the *N. C. Med. Jour.*, November, 1883:

Reuben Clark (col.), æt. 65 years, consulted me about three months ago on account of the red color of his perspiration, which he says has occurred occasionally during a period of about nine months. His usual occupation is that of a wheelwright, but at that time he was engaged as a farm laborer. He showed me some reddish stains on his shirt collar, and said that the colored perspiration was found over the surface of his body. A few days later he called, at my request, and brought a sheet on which he had been sleeping. This sheet had some bright red stains which he said were caused by perspiration. On several occasions after this I got him to put white cloths next to his body, and bring these to me when they would become stained. Although I had before this seen two cases of reddish exudation from the skin—one unilateral, chiefly in the right armpit, and the other about the groin—I had never seen so well-marked a case both as regards the brightness of the red, and the extent of the perspiring surface.

I was disposed to question its genuineness, but repeated observations and cross-examinations led

me to believe the old man's statements. Recently, not being expected by him, I went to his house—found him wearing a blue-checked shirt, the collar of which was distinctly stained red. He said, with the exception of the stains which I saw, he had not had any colored perspiration in several weeks. A close examination showed the stains to be chiefly on the right side.

My first knowledge of this patient was about six months ago, when he consulted me on account of partial loss of vision, accompanied with fever, pain in the eyes and around the orbit. His vision was O. D. $\frac{1}{30}$, O. S. $\frac{1}{30}$ X. Glaucoma was suspected, but tension was not sensibly increased. Ophthalmoscopic examination showed the refracting media to be clear. The results of the examination were chiefly negative. There is a slight appearance of atrophy of the nerve. He improved while taking full doses of quinine, bromide of sodium and fl. ext. of gelsemium. Fever and pains disappeared, but there was very little change in vision.

During the past five years this man has been subject to seizures which I think are of an epileptic character. He says on one occasion while in his workshop everything seemed, very suddenly, to turn upside down.

His daughter describes a sort of convulsive attack which he has at night while asleep, and which I take to be a mild form of epilepsy. These facts are stated to establish the probable neurotic origin of the chromidrosis. He complains of great languor when the sweats occur. He was treated with free doses of bromide of sodium, followed with Fellows' syr. hypophosphites, under which he has improved.

A Case of Epididymitis.

Dr. William L. Axford reports this case in the *Jour. Cut. and Ven. Diseases*, October, 1883: A young man, aged twenty-two, who had recently contracted his third gonorrhœa, asked me to see him, as he was suffering considerable pain in groin, and was afraid that his testicle was going to swell. I found that a well-marked attack of epididymitis had set in, and that the right testicle, which was involved, was the only one which had descended. Careful physical examination failed to reveal the whereabouts of the other. Rest in bed, elevation of the affected organ, anodynes, and the usual routine treatment was carried out, resulting in his recovery in a reasonable time.

On examination some days after he was sufficiently well to be about, the globus major was found enlarged, hardened, and tender, the globus minor being in a like condition. Curious to know whether his undescended testicle was of any value, and also desiring to know whether or not he was sterile, I asked for a specimen of his semen for microscopical examination. A careful examination showed that there was not a single spermatozoon to be seen, and that, though sexual desire and the ability to copulate were as perfect as ever, he was completely sterile.

An ointment was given him as follows:

R. Iodoform,	℥ ss.
Potass. iod.,	℥j.
Ung. petrolei,	℥j.

He was directed to seize the testicle so as to bring the posterior part next the skin, and to thoroughly rub in a quantity of the ointment as large as a filbert, morning and evening. His semen was examined at intervals of a fortnight.

For some weeks no spermatozoa could be seen, but at the end of two months they gradually put in an appearance, and finally the semen contained a normal quantity. The enlargement, induration, and tenderness also disappeared. Whether this happy result was due to the action of the ointment, to the massage, or whether nature would have cleared out the obstructed ducts in time, I am not prepared to say.

The Occurrence of Three Infectious Diseases in the Same Individual.

The *London Med. Record*, November 15, 1883, tells us that Dr. Prior, assistant to the Royal University Polyclinic in Bonn, communicates to the *Deutsche Med. Wochenschr.*, August 1, a case in which three different infectious diseases occurred in the same individual in the space of one month. Three children were attended on November 18 for well-marked scarlatina, with a temperature of 104° Fahr., copious eruption, and some difficulty of swallowing. Desquamation began on November 21, and proceeded normally, only one child having slight renal symptoms, until, on December 1, the two younger were attacked with rigors, headache, and malaise, and on the following day were covered with a thick eruption of varicella. On December 3, in the absence of the mother, a child from the next room, intercourse with which had been carefully avoided on account of measles, was found playing with the child, and showed signs of measles next day. The first patients were now carefully watched, and on December 13 the temperature was found to be raised, with photophobia and slight coryza; on the 15th the eruption of morbilli appeared. Its course was protracted, and caused some anxiety; but, finally, the children recovered. The cases show how the two poisons of scarlatina and varicella may be in the organism at the same time, and how measles may be conveyed by a two hours' intercourse in the prodromal stage, while the crusts of varicella are still present, the measles showing itself as soon as ten days later.

Nerve-Stretching.

The following are the conclusions of Dr. H. G. B. Wright, in the *Jour. Am. Med. Ass.*, November 3, 1883:

1. The operation was productive of good in only two of the fourteen acute cases, while it was beneficial to a greater or less degree in seven of the eight chronic cases.

2. The nerves of the upper extremities were stretched in the acute cases, and those of the lower extremities in the chronic.

3. The procedure had no effect on the case of dysæsthesia of fourteen years' standing, this being the only one of the chronic cases on which the operation was a complete failure, the result of the case of sciatica following spinal meningitis being set down as only a slight improvement.

4. The five chronic cases reported cured were sciatica.

5. No unpleasant results are reported as having followed the operation, except those in the case operated on by ourselves.

These facts are certainly reassuring, and take away from the operation the phantom of danger that might cause many an anxious physician to withhold the knife and allow his patient to suffer through months, and even years; and it adds another justifiable resource to the many with which we have been fighting neuralgias, especially of the sciatic nerves.

The Treatment of Boils and Carbuncles.

The *London Med. Record*, December 15, 1883, tells us that Dr. Rupprecht, of Hettstadt (*Deutsche Med. Wochenschr.*, May 23), regards furuncles, carbuncles, and anthrax pustules to be all dependent on an infectious cause, and the same treatment to be suitable for all of them. In boils he removes the little scab which always forms early on the top, and presses into the purulent cavity a little piece of cotton-wool moistened with spirit of ammonia. This ought to be done six or eight times at a sitting, a fresh piece of wool being used each time, and it may be necessary to repeat the treatment on the following day. In very large boils scarification, and in carbuncles a cross incision, must precede the application of the ammonia; in anthrax, the scab must be removed, and the surrounding tissue scarified in a radiating form. The part should be dressed with boracic ointment after this cauterization, and it generally heals without causing any disturbance. Boils in the external ear, where septic material is easily conveyed by the fingers, should be incised with a very small knife, and then dressed with some antiseptic which will not injure the tympanum, such as thymol, boracic acid, or iodoform.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—Dr. A. E. Prince, of Jacksonville, Ill., sends us a reprint from the *St. Louis Medical and Surgical Journal*, October, 1883, in which he defines the true position of bromide of ethyl as an anæsthetic. He claims its applicability to short operations, since it produces anæsthesia very rapidly (which does not last long), and the patient recovers consciousness without any unpleasant sequelæ. He also advocates it as a precursor to the administration of ether.

—We have received as a reprint from the *Journal of the American Medical Association* Dr. Seiler's paper on "The Pathology of Phthisis Pulmonalis and Its Laryngeal Complications," a synopsis of which has already appeared in our pages.

—"Medical Thoughts of Shakespeare," by

Dr. B. Rush Field, of Easton, Pa., is an interesting compilation. Shakespeare had a great deal to say about doctors, medicines and diseases. The disease he refers to most frequently is syphilis, and his "favorite branch of the profession," says Dr. Field, was obstetrics. The bard, says Dr. F. "had evidently not a very high idea of the physician, and generally treats him with contempt."

—*Science*, published at Cambridge, Mass., has altered its make-up, in order to assume a more popular form. We regret that this was found necessary.

—The *Archives of Pediatrics*, edited by Dr. W. P. Watson, Jersey City, N. J., is a promising addition to our specialist journals. It is a monthly of sixty-four pages, three dollars a year, and is, as its name denotes, devoted to diseases of children. We recommend it to the profession as a periodical of a high class.

—In his late article on "The Ovarian Cell" (reprint), Dr. T. M. Drysdale, of this city, answers various criticisms on his previous writings, and certainly puts one or two of his critics in a position which, if they are sensitive, must be unpleasant for them.

—Among the new ventures of professional journalism, we mention the *Analectic*, a monthly periscope summary of the progress of medical science. Edited by Walter S. Wells, M. D., formerly editor of *Quarterly Epitome of Practical Medicine and Surgery* and *Epitome of Braithwaite's Retrospect*, etc. It is published by G. P. Putnam's Sons, New York City. Price \$2.50 per year.

—*Lippincott's Magazine* for January contains an amount of varied and entertaining reading, which gives the best assurance of the good things to be expected during the coming year. It opens with a description of the new Public Buildings of Philadelphia, written with marked ability, and copiously illustrated. Dr. Felix L. Oswald contributes a well-written article on Healthy Homes.

—*Littell's Living Age* begins its one hundred and sixtieth volume in January. Foreign periodical literature, and especially that of England, continues to grow both in extent and importance; and *The Living Age*, which presents with satisfactory freshness and completeness the best of this literature, cannot fail to become more and more valuable to its readers.

—The *North American Review* continues its active excursions into lively questions by an article on alcohol in politics in the January num-

ber, and a series of other communications on the most prominent topics of the time.

—The *Kansas Medical Journal*, a monthly published at Kansas City, Mo., makes its debut with the opening year. It is neatly printed, with a good selection of contents.

BOOK NOTICES.

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Transactions of the Minnesota State Medical Society, 1883. St. Paul's, 1883.

A handsome volume of about 300 pages gives full testimony to the activity of the Minnesota physicians. The contents bear out the general appearance of the volume. The annual essay is on functional diseases of the nervous system, which is followed by reports on practical medicine, surgery, etc., including a number of original observations by various members of the Society.

We would call the attention of the publishing committee to the importance of having an index and a table of contents to their publications. The present volume has neither, and it is a decided drawback to its usefulness in these days of hurried reading.

Voice, Song, and Speech: A Practical Guide to Singers and Speakers. By Lennox Browne, F. R. C. S., and Emil Behnke. 1 vol., 8vo. Illustrated. Cloth, pp. 319. G. P. Putnam's Sons, New York.

The authors of this volume, one of whom is a distinguished laryngologist, the other a lecturer on and teacher of elocution, have combined their experience to write a work which shall cover the whole domain of vocal cultivation. Just what they have had in view can best be shown by a brief synopsis of the contents of the volume. The laws of sound bearing upon the voice having been discussed, a rather full description of the anatomy and physiology of the vocal organs follows. The qualities of the voice as a musical instrument are then compared, and its hygienic management is explained in detail. Some directions are inserted about the laryngoscope, and the rules of voice cultivation are succinctly stated. The ailments of the voice and the defects of speech occupy the last chapters.

The illustrations are admirable, many of them being photographs, and reproduced with the highest artistic skill. The directions for the care and development of the voice are clear and intelligible, both to the physician who is not a musical artist, and to the artist who is not a physician.

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THE RELATIONS OF MICRO-ORGANISMS TO DISEASE.

This is really the most vital question before the medical profession to-day, because upon it hangs our whole system of therapeutics.

If it be ultimately demonstrated conclusively that disease is caused by the presence of an active, living organism, of a vegetable parasite, in the body, then must we look for a *specific* therapeutics; for if a certain disease is caused by a certain organism, and a particular drug possesses properties fatal to the life of this particular organism, such a drug is clearly indicated, and must always be resorted to in the treatment of this disease.

To-day, the sensible physician really treats symptoms.

In chills and fever and in syphilis, we always resort to quinine and to mercury; but when we get beyond this narrow limit, we really treat symptoms as they arise.

How many physicians treat diphtheria in the same way; how almost infinite are the drugs recommended for it? Does this not simply mean that we have not a specific remedy capable of controlling or neutralizing the cause of the disease? If diphtheria is caused by a micro-organism, and if we can place our hands on any one drug or combination or assortment of drugs that will always destroy the vitality of this particular organism, then have we a specific for diphtheria that will always be relied upon when the disease manifests itself.

Again, the question possesses great importance from a diagnostic point of view. If an organism, possessing certain definite characteristics, which are always revealed by the microscope and the aid of chemicals, is proven to be the cause of a certain disease, then can we be absolutely and positively sure of our diagnosis, instead of groping in the dark as we so often are compelled to do to-day.

As an aid to prognosis, also, does this question assume most important proportions. If, as Professor Flint (Sr.) believes, the proportion in which the bacilli of tubercle are found in the sputa of

tuberculous patients, holds an intimate relation to the gravity and rapidity of progress of the disease, and if this same rule holds good in other diseases, then have we placed at our service the necessary data upon which to found a much more accurate prognosis than the best of us can hope to do at present. Thus, then, we see that the question of the relations of micro-organisms to disease has a most important bearing upon the three great practical elements of our profession, namely, diagnosis, therapeutics, and prognosis.

Are micro-organisms the *cause* of disease, are they the results of disease, or do they merely occur accidentally in the course of disease?

These are the questions that hundreds of earnest and indefatigable investigators are daily striving to answer.

Both sides, or rather each of our three questions, are answered affirmatively by a certain number of physicians; but after reviewing the literature of the subject impartially, we are inclined to feel that the majority of those who are qualified to express an opinion lean towards the germ theory;—they believe that many, if not all diseased conditions, are produced by the entrance into the body of micro-organisms.

We are all familiar with the researches of Koch, and we know that many distinguished investigators have joined him in the belief that the bacillus is the cause of tuberculosis, while there are also some who oppose this view.

Gradually, micro-organisms are being found in one disease after another, and experiments are being constantly performed to determine their relation to these various diseases.

Dr. Julius Dreschfeld made a most interesting address on this subject at the late meeting of the British Medical Association, from which it can be plainly seen that he accords a high place to micro-organisms in the etiology of disease. He believes that they gain access to the system either by inspiration, through the alimentary tract, or through a denuded cutaneous surface. He seems to believe that sufficient evidence has been adduced to prove that erysipelas, septicæmia, gonorrhœa, glanders, splenic fever, relapsing fever, and tuberculosis, are

due to micro-organisms. Of course he admits, what we must all hold, that these parasites must find suitable soil, else they cannot produce disease; that some condition of the system must be present, else they cannot work mischief. What these conditions are, we do not know.

Our own Dr. Formad is the only investigator who has thus far taken up this side of the question, and his researches are confined to one disease.

While so much uncertainty surrounds this grave question, it is not well for us to accept absolutely any doctrine; let us remain unbiassed and unprejudiced, ready to receive and to carefully weigh all evidence *pro* and *con*.

The field of investigation is so full of earnest and capable laborers, that it would seem that we will not have long to wait until this 'germ theory' has been either absolutely and undeniably received or rejected; and if received, until we have definite and specific information about the nature and properties of each particular organism.

If they are proven to be the causes *per se* of disease, and if we can find certain drugs possessed of the power of robbing them of their baneful influence and of correcting the condition of the system essential for their active life, then have we at last placed medicine upon the pinnacle of an *exact* science, to which she has been aspiring for so many hundreds of years.

CURATIVE HYGIENE.

The average physician pays too little attention to the potent agency of curative hygiene; he relies too implicitly upon the drug treatment of disease, and then he wonders why some of his patients who *ought* to get well fail to do so.

We know that the zymotic diseases are caused by unsanitary surroundings; yet, when called to such cases, how many physicians inquire into the hygienic conditions and remedy those that are faulty? Do not the majority merely write out a prescription after making the diagnosis, and hurry off to the next patient? How rarely are directions given for the patient's diet, unless some of the friends ask the question?

We do not mean to belittle the influence of drugs; there is a tendency to do so in certain directions, but with this move we cannot sympathize, since we have great faith in the curative power of drugs, and believe that the day is not far distant when our therapeutics will be placed upon a very *exact* basis.

But we desire to insist upon the great value of placing our patient's surroundings in such a sanitary condition, that pernicious agencies will not be constantly counteracting and antagonizing the curative workings of our drugs.

In the *Glasgow Med. Jour.* for December, 1883, Dr. Eben Duncan very wisely and very forcibly says:

"In every house in which he (the physician) treats a patient, he ought to be able to recognize and suggest a remedy for defects of ventilation and for defects of sewerage. These matters should not be left to ignorant tradesmen, because there can be no doubt that diseases of every kind assume a more serious character, and are more intractable in ill-ventilated houses, or an atmosphere tainted with sewage-gases. He should be able to point out any error in the position of well or cistern which renders it liable to contamination, and to apply simple tests to ascertain the quality of the water. He should be able to recognize adulterations in bread, and to detect the various dangerous conditions of the milk supply, or of butcher meat, which may seriously affect the recovery of his patient. He should be able to recognize dampness in walls, and to point out its causes and its dangers—to detect arsenic in papers and bed-hangings. He should be carefully educated in the laws of infection and disinfection, in the nature of soils, and in the effects of climate. In short, I hold a man is not properly equipped as a physician who has not studied these subjects, both in their prophylactic and in their curative aspects, as carefully as he has studied *materia medica* and pharmacy. I therefore hope that in any reconsideration of the curriculum of the medical student, hygiene will be made an integral part of the course of study. At the present time the majority of medical students get no adequate instruction in sanitary science. They frequently pass all their professional examinations, and obtain a qualification to practice, without having been asked a single question, written or oral, having any bearing on such important

matters as disinfection, drainage, water supply, and ventilation."

We have already advocated the establishment of a chair of hygiene in the regular curriculum of our medical colleges, and we do most heartily agree with Dr. Duncan that the physician who is not familiar with the doctrines of preventive and curative hygiene is minus a most important weapon in his warfare with disease.

DRAINAGE AND DIPHTHERIA.

While we are very much at sea in reference to the exact nature of the specific cause of diphtheria, stern and incontrovertible clinical experience teaches us that it is a filth disease, and that defective drainage is a prolific general cause. Numerous instances, similar to the following from the *Brit. Med. Jour.*, December 1, 1883, have been lately published, all of which tend to substantiate the idea of a filth etiology. There was recently an outbreak of diphtheria at Canterbury:

"In all the cases—eight in number—the cause was local, and there is no evidence of an epidemic. Six of the children attacked with diphtheria resided in a house which was in a most unsanitary condition; the water used for drinking purposes was found to be polluted with sewage, and a hole was discovered in a drain which ran under the parlor, allowing the sewer-gas to enter the living-room of the family. Inquiry into another case in the same neighborhood revealed a like contamination of the water, and defective drainage. There was one other case, in a different part of the city, where the water was good, but the drainage at the school which the child attended was found to be very defective."

A word to the wise is sufficient. It need not concern the practical physician, whether the cause of diphtheria is a bacillus, or a micrococcus, or a micro-anything-else; if defective drainage will produce the cause, let him remedy the defect and prevent the development of the cause.

NEW WORDS IN MEDICAL WRITING.

In examining the numerous treatises, articles, and monographs which naturally come under the eye of an editor, it has often impressed us that there is in medical language a needless excess of

terminology. New words are coined by some writers to a degree that makes the freshest dictionary antiquated, and forces one to his Greek lexicon on every page. Nothing is gained by this display of erudition. In fact, it is not sound learning. One who thoroughly knows his mother tongue and is familiar with the received and generally accepted terms of his profession, will very rarely have need to coin a new word. To do so, is quite as often a proof of ignorance as a display of pedantry.

There are crises in the history of science and thought when an old terminology must be discarded and a new one adopted, because the series of ideas to be introduced are no longer connoted by the old expressions. So there are single discoveries which demand new names. But they are rare, and often are but a faint modification of previous knowledge. Much more frequently, the application of these new words is to matters already named, and hence we come to have a cumbersome and deceptive synonymy.

We have but to turn the pages of any of the extensive medical dictionaries, to note how very many words have been prematurely born into the terminology of medicine, there to have an ephemeral existence, to throw no new light, and finally to be fossilized into a shadowy unreality in the pages of the lexicographer.

It is far better to be cautious and procrastinating about introducing new words. Before doing so, let the writer carefully study his topic and clarify his thought, to see if there is not already a word suitable to receive it. The greatest masters of style have always studied simplicity of language, and *economy* is the highest criterion of good writing; economy of words, we mean, so that the idea is conveyed in the fewest and plainest terms.

NOTES AND COMMENTS.

A Bony Tumor of the Breast.

To the Pathological Society of London (*Med. Times and Gaz.*, November 24, 1883), Mr. Durham detailed the case of a woman, aged twenty-seven,

who, two years previously, had noticed pain in the left breast, which was followed by the appearance of a tumor. This seemed to be a case of adenoid tumor, though around it was an induration, which raised some doubt as to its nature. It was indistinctly lobulated, and enclosed in a capsule. On section it was found to be of pinkish-gray color; some parts soft, some harder, some friable. The principal part had a plate, three-eighths of an inch across, of bony tissue embedded in it. Microscopically there were trabeculae of osseous tissue, with lacunae and canaliculi. The tumor was a very distinct and well-characterized sarcoma; there were abundant cartilage-cells contained in it. At the periphery there was some glandular tissue, with intracystic growths.

Tamar Indien.

It is well known that Tamar Indien is a very agreeable and a very satisfactory laxative. The *Report de Phar.*, July 1883, gave the following as its formula:

R.	Tamarind pulp,	450 parts.
	Powdered sugar,	40 "
	Powdered sugar of milk,	60 "
	Pure glycerin,	50 "
M.	Evaporate to consistence of soft extract.	
	Add—	
	Powdered senna leaves,	50 parts.
	Powdered anise,	10 "
	Essence of lemon,	3 "
	Tartaric acid,	3 "
M.	Divide into 100 boluses. Steam them, and roll in the following mixture—	
	Cream of tartar,	5 parts.
	White sugar,	} aa 35 "
	Sugar of milk,	
	Tragacanth,	2 "
	Tartaric acid,	2 "
	Powdered red sandal,	25 "
	Dry and put up in tin foil.	

A Formula for Koumiss.

We note the following formula in the *Druggist's Circular and Chemical Gazette*:

R.	Fresh milk,	5 gallons.
	Spring water,	13 pints.
	Baker's yeast,	2 "
	Simple syrup,	1½ "

Mix, and skim off the top. Then put the liquid into bottles which are to be laid on their side, from one to four weeks, in a cool place, the temperature of which must be below 70°. The different stages of the preparation are as follows: After one week the koumiss is *fresh*; after two weeks, *medium*; after three or four weeks, *old*. A champagne tap is very convenient for drawing the liquid.

No Work and Wrong Work.

It is well said by a contemporary that a common and fruitful source of low spirits is the unwise apportionment of our daily work. Too much labor, as suggested in the above quotation, especially if united with care, is sure to produce gloom; and the weary man who returns to his family at night to sadden them by his funereal aspect and his catalogue of woes, should leave off claiming sympathy for what only deserves criticism. On the other hand, nothing is more fatal to a cheerful spirit than idleness. To have nothing that we *must* do, or having it to neglect it, will throw a shadow over the lightest heart and the most sunny countenance. Regular, congenial labor, in moderation, and the consciousness of faithful performance and growing ability, are tonics to the spirits that none can afford to dispense with.

Rule for Reducing Dislocations of the Hip-joint.

We note the following in the *Polyclinic*, December 15, 1883:

Having flexed the leg on the thigh, and the thigh on the pelvis, slowly rotate the limb as far as possible, inwards or outwards, according as the toes pointed in or out before beginning the manipulation; then rapidly and forcibly rotate the limb in the opposite direction, and the head of the femur will usually slip into the acetabulum.

For example: In the iliac and the sciatic dislocations, the toes point inwards; therefore, rotate inwards as far as possible, and afterwards rotate outwards. In the pubic and thyroid dislocations, the toes point outwards; hence rotate the limb outwards still more, and then inwards.

Long-Retained Pessaries.

It may prove useful as furnishing the key-note to some obscure cases of ill-health, if we bear in mind that cases are on record where a pessary has been introduced to correct some uterine deformity, and being forgotten, has been allowed to remain for years in the vagina, acting constantly as a foreign body, provoking inflammation and supuration, and producing a variety of morbid phenomena through the agency of reflex nervous influences. Dr. C. F. Paine reports a case in the *Texas Courier-Record of Medicine*, November 1883, where a Hodge pessary, forgotten and worn for thirteen years, has, he fears, permanently injured the woman's health.

Bichloride of Mercury in Diphtheria.

If diphtheria is due to a germ, and if corrosive sublimate possesses the germicide properties that

Koch ascribes to it, we can understand why Dr. Madison Reece (*Jour. Am. Med. Ass.*, November 24, 1883), has had good results from this drug. His method of preparing this medicine is to dissolve one grain of the bichloride in four ounces of rain-water; then, if the patient is old enough to gargle and rinse the throat and mouth, he is to do so every two hours, and immediately afterwards to take a teaspoonful internally. If the disease be of a severe form, it should be administered in this way every hour. The above dose is calculated for a child of five years of age. It should be continued in smaller and less frequent doses for a week or longer.

Is Tuberculosis Spontaneously Curable?

Yes! At least so it would seem from a case reported in the *Deutsch. Med. Woch.* by Dr. Nauwerck. Four brothers of the patient had died of pulmonary tuberculosis, and in 1877 he began to cough, lost flesh and looked sick, which symptoms, after lasting one year, disappeared without treatment. Six years subsequently he died of cancer of the pylorus, and at the autopsy, the apices of both lungs were found adherent to the costal pleura, the pulmonary parenchyma was shrunken and toughened, and there were scattered patches of caseous and calcified tissue. A few typical bacilli were found in a small cavity, filled with caseous material and surrounded by thick walls.

Subcutaneous Injections of Ether.

Dr. C. E. Sheely (*Brit. Med. Jour.*, November 17, 1883), has had good results from its use as a stimulant. The dose is from fifteen minims to half a drachm. He thrusts the needle through the true skin and superficial fascia, and then enters it for about three-quarters of an inch parallel to the surface. He has never seen abscesses result. As ether is a ready solvent of fat, it is advisable to look to the leather packing of the piston of the syringe as soon as possible after using it, and to re-oil it. The ether also attacks the cement used to secure the mouth to the glass barrel, and they will, sooner or later, become loose. Moreover, as it acts upon "celluloid," a syringe made of this material should not be used. He gives the preference to glass. *Ans. & Surg. Rec.*

Catarrh of Ethmoid Cells and Frontal Sinus and Nasal Canal, Caused by Maggots.

Dr. Fred. Humbert reports some cases in the *Jour. Am. Med. Ass.*, December 8, 1883. The fly deposits the eggs in the nostrils, and they there

develop. Their skin is horny, hence remedies will not readily act upon it. He recommends carbolic acid injections and hypnotics. When the maggots are mature, they drop out of their own accord; and since they have no reproductive power, there is a natural limit to the disease, if we can support the patient's strength. Some cases have terminated fatally.

Prostatic Gout.

Dr. Reginald Harrison calls attention to this condition in the *Lancet*, November 24, 1883. The attacks usually come on at night, more frequently in persons of a gouty diathesis, who have previously remained free from the more ordinary attacks of gout. The urine is loaded with lithates, and is invariably of an acid and irritating character, whence the appropriate treatment is the use of alkalis.* There is also a chronic form, best relieved by iodide of potassium internally, and mild counter-irritation to the perineum.

Micro-organisms in Typhus Fever.

Determined not to be left out in the cold, typhus fever presents to us her micro-organisms. Drs. Frederick W. Mott and J. Blorc told the British Medical Association (*Brit. Med. Jour.*, December 1, 1883,) that during the recent epidemic of typhus fever in Liverpool, they found in the blood, during the pyrexial period, moving organisms, like minute screws, which they consider to be dumb-bell micrococci, undergoing division. As a rule, they disappeared during convalescence, though in one case they were found in large numbers in the blood after the fever had subsided.

Nitrite of Sodium.

We have elsewhere noted that Drs. Ringer and Murrell have concluded that the ordinarily-prescribed dose (20 grs.) is dangerously large. From some observations of Dr. A. H. Baines, in the *Lancet*, December 1, 1883, it seems that this drug is often adulterated with nitrate of sodium, and from this fact has arisen the supposed necessity for such large doses. If we can procure the pure drug, and we ought to do so if we use it at all, two or three grains will be the dose. Dr. Baines reports a case of *petit mal* in which its use was very beneficial.

Egyptian Tamarind Flowers in Piles.

Our correspondent, Dr. Brobst, at Litiz, Pa., states in a letter to us that he has found a wine-glassful, three times a day, of an infusion of the above flowers, a valuable, pleasant laxative, and

very useful in hemorrhoids—quite a specific, indeed. The flowers are described in the United States Dispensatory, and recommended as a nerve tonic. He obtained the flowers from Carpenter & Co., Philadelphia, which house he names, as many of the flowers offered in the market are too old.

Fœtid and Sweating Feet.

Dr. A. M. Vail (*Jour. Am. Med. Ass.*, November 3, 1883,) says that he has never known the following to fail:

R.	Aluminii et ammo. exic.,	grs. 2.
	Acidi boracici,	grs. 2.
	Aquæ simp. or rosæ,	grs. 35.

Mix. Sig.—Apply with soft sponge without rubbing, just as soon as the shoes and stockings are removed, while the feet are yet moist. This is quite necessary, as also the care not to rub.

Let this be repeated every two or three days, in the evening.

Resuscitation of Still-born Children.

In the *Vracheb. Vedomosty*, 1883, No. 560, p. 3,856, Dr. H. I. Rodzewicz, of Nijni-Novgorod, relates the case of a primipara, in which he delivered, by podal version, an infant without pulsation in the umbilical cord, or any other signs of life. Schultze's method having proved unsuccessful, the author took a large basin, filled it with hot water from the *samovar* (Russian tea-machine), added cold water until the temperature of about 35° R. had been reached, and placed the infant in the basin, leaving free only her head. In a minute or so the child began to breathe and lustily cry.

Gummatous Tumors in Muscles.

When we have presented to us a muscular tumor, it is well to inquire, and inquire searchingly, for a specific history. Syphilitic gumma of muscles, Dr. Hugh Percy Dunn (*Lancet*, November 24, 1883,) tells us, are not so very common, yet neither are they very rare. Under appropriate treatment, they will rapidly disappear, while, if not antagonized by anti-syphilitic remedies, they will eventuate in nasty, deep-seated abscesses.

An Ocular Polypus.

The appendages of the eye is an unusual seat for a polypus, yet Dr. S. Pollak reports a case in the *Jour. Am. Med. Ass.*, November 24, 1883. In a woman aged 74, blood was constantly oozing from beneath the upper lid. Vision was perfect.

On everting the lid, a painless tumor (bleeding profusely on the slightest touch) was extruded. It was twisted off with forceps, and the result was entirely satisfactory; the wound having nearly cicatrized by the next day.

Napelline for Neuralgia.

Dr. Grognot (*Bull. Gen. de Therap.*) reports a case of trigeminal neuralgia, rebellious to a variety of treatment, that finally yielded to napelline in doses of $\frac{1}{800}$ of a grain every two hours. This dose seems like infinitesimalism, but it is that which is reported.

A Good Dressing for Ulcers.

Nearly all of the usual applications to ulcers will, at times, fail, hence we note with a sense of satisfaction that Dr. Maison (*Moniteur de la Polyclinique*) finds the subcarbonate of iron very efficient. He washes the ulcer with carbolized water, dusts the iron on thickly, and applies a starch poultice. The dressing is changed twice a day.

Unusual Symptoms Following the use of Unguentum Hydrargyri Ammoniati.

In the *Brit. Med. Jour.*, December 29, 1883, Dr. Shirley Deakin reports two cases of chronic eczema in which this ointment was used. To his surprise, it set up acute attacks of eczema (in one case extending all over the body), which were exceedingly slow in disappearing.

Another Cause of Epilepsy.

Dr. Allen de Vilbis calls attention to the fact (*St. Louis M. and S. Jour.*, January, 1884), that inflammation of the lining membrane of the nasal cavities may produce epileptiform convulsions. He reports three cases in which appropriate treatment for the catarrh relieved the attacks. Here is another illustration of the power of reflex action.

The Amniontome.

Failing to meet with the success usually ascribed to the finger-nail for rupturing the membranes in labor, Dr. George F. E. Wencke, of Ninety-Six, S. C., describes a simple and ingenious device in the *Med. News*, December 8, 1883. It consists of a steel spring frame to which a small blade is attached. It is adjustable to the index finger of the right hand, but will fit any finger, both right and left. Placed in position, it will not interfere with the main joint of the finger, which can be moved at will while it is firmly attached.

Reflex Nervous Influence Again.

We have had a great deal to say lately about reflex nervous influence, but if it causes some to look behind the manifest signs for the cause of departure from health, our purpose will have been accomplished. Prof. Henoch tells us in the *Wien Med. Blatter* of a case of sudden aphasia in a three-year-old girl, which rapidly disappeared after vomiting an unchewed cherry.

Blistering in Diphtheria.

It might be well to bear in mind, in connection with other treatment, that Dr. F. W. Bartlett, of Buffalo, N. Y., reports one case (*Therapeutic Gaz.*, December 1883,) wherein the throat exudation markedly diminished, and the general symptoms greatly improved after the accidental blistering, most severely, of the abdomen, with hot turpentine. The raw belly was covered with an exudation, identical, to ordinary inspection, with that in the throat.

Foreign Bodies Swallowed and Passed per Rectum.

To the Medical Society of London Dr. Munro exhibited a portion of a chain, three inches and a quarter long, which had been swallowed by an infant aged eighteen months, and passed per anum after twenty hours.

Mr. Henry Morris outlined the case of a young man who had swallowed an aluminium pencil-case, such as might have formed a pendant to a chain. This was ejected after five days, and was then found to have undergone changes in color and substance.

Paraldehyde—Acetal—Cannabinum Tannicum.

Dr. Eickholt contributes an article on these drugs to the *Deutsch. Med. Woch.*, December 5, 1883. The two first he does not like, considering them uncertain as hypnotics, and that they possess injurious properties (such as deranging digestion, producing nausea, and the like) that more than counterbalance their virtues. Cannabinum tannicum (derived from Indian hemp), in doses of $\frac{1}{8}$ to 1 grain, he considers especially useful in neurasthenic insomnia, and in mild melancholia without delusions, but not in excitable conditions. It does not derange digestion.

Resection of Half of a Vertebral Body.

Israel, of Berlin (*Berliner klinische Wochenschrift*, No. 146, 1882), reports a case in which a patient with curvature of the spine suffered from abscess and paraplegia. Supposing that the last-named

was due to compression of the spinal cord by a purulent collection, Israel resected the twelfth rib and half of the twelfth dorsal vertebra, and was thus able to evacuate the abscess. The paraplegia was not at all modified by this interference, and the patient died at the end of thirty-seven days, after having presented symptoms of purulent pleuritis.

Catheterization of Infants.

We took occasion recently to note that the evidences of disease that would be revealed were the urine of infants and children more frequently examined would be greatly to our benefit in diagnosis. We now read in *Jahrbuch f. Kindheilde* that Hirschsprung recommends catheterization in order that we may procure the urine for such examination. He prefers a metallic catheter with a rather short end and the point solid to the eye. He scents the idea of its use being dangerous, and strongly recommends it as a powerful diagnostic adjuvant.

The Inoculation of Tubercle.

The weight of evidence seems to be in favor of the doctrine that tuberculosis is inoculable, provided the soil upon which it is deposited is suitable. This teaching gains additional strength from the case reported in the *Deutsch. Med. Woch.*, by Dr. Mosler. Ten days after the first appearance of cough, in a patient who would not eject, but always swallowed his sputa, diarrhoea and severe colic supervened, which proved fatal in eight days. The autopsy revealed tubercles in the lung and intestines. A recent attack of typhoid fever had, most likely, left the intestines weak.

Nerve Lesions in Skin Disease.

It would be a great stride in the progress of dermatology if we were able to trace a definite causative relation between nerve lesions and skin diseases. In *Virchow's Arch.*, Dr. Meyer relates a case of pemphigus, which commenced as a simple eczema. The patient died seven weeks from the commencement of the disease, diarrhoea being the most apparent cause. At the autopsy, the cutaneous blood-vessels were found obliterated by endarteritis, and the nerves showed extreme parenchymatous degeneration. While no symptom had been apparent, during life, of disease of the cord, marked scattered sclerosis was found. While he does not consider it settled, yet Dr. Meyer suggests that the vascular obliteration in the skin, by interfering with nutrition, may have rendered

it more susceptible to disease evoked by the condition of the nerve centre.

Salicylage.

This is the term applied to the practice resorted to in Paris of using salicylic acid as a preservative of food and drinks. The question of its injurious effects was recently referred by the government to Prof. Brouardel, who reports as follows: 1. The daily use of even the smallest dose of salicylic acid is unsafe, its innocuity not having been as yet demonstrated. 2. It is certainly dangerous for the subjects of lesions of the kidneys or of the liver from old age or by some degenerative process. 3. The prohibition of salicylage should be strictly maintained.

A Point in Diagnosis of Aneurism of the Basilar Artery.

MM. Hallopeau and Giraudeau relate a most interesting case in *L'Union Med.*, December 11, 1883. When the head was bent forward, respiration stopped in the stage of expiration, while the pulse, after beating regularly for some seconds, became gradually slower. When the head was thrown back, respiration was immediately re-established. It was supposed that the phenomena observed were due to the pons varolii having become compressed by the aneurism when the head was flexed, whereas during extension of the neck the artery would be elongated, and so the aneurism carried out of reach of the pons.

Kidney Disease of Pregnancy.

In a recent issue of the *Zietschrift für Geburtshülfe und Gynakologie*, Dr. Flaischlen concludes that it is due to a reflex anæmia of the kidneys excited by the gravid uterus. This anæmia leads to degenerative changes of the epithelium in the renal tubules. In consequence of these changes the excretion of urea becomes deficient. In some cases these changes come on during the latter half of pregnancy, and their evil consequences are then best averted by the induction of premature labor. Sometimes, on the other hand, they are produced by the uterine contractions of the process of labor itself.

Arrested Phthisis.

In view of the fearful mortality of this disease, it is encouraging to read of cases that have pursued a favorable course. In the *Boston M. and S. Jour.*, December 13, 1883, Dr. Bowditch reports a case of arrested phthisis. The patient lived to fifty-one, and had chronic pleurisy for two-thirds

of his life. Every few years crackling appeared under the clavicles. Although a microscope maker, he got as much walking as possible. There was no tubercle, but a general amyloid degeneration. The speaker would never give up a man who had the pluck to keep out of doors. Crepitation may last for twenty years.

Tuberculosis Conveyed by Food.

Two small children were fed with food that had been previously chewed by a phthisical mother. Soon ulcers appeared in the mouth, and they became emaciated. When death ensued, tuberculosis of the lungs, pleura, liver, spleen, kidneys, and lymphatic glands was found. It is worthy of note that while the mother's expectoration was scanty, the children maintained their health, but as soon as it became profuse they sickened. For some time before commencing to chew the food, the mother had suckled the children with impunity, but it must be remembered that the disease had not then advanced far. Hezerich reports this case in the *Bayerisches Artzl Intelligenz Blatt*, No. 26, 1883.

Cotton-Root Bark as a Substitute for Ergot.

Prochownick told a recent meeting of the German Gynecological Society (*Am. Jour. Obstet.*, January, 1884), that he had experimented with cotton-root bark because he thinks it desirable to find a substitute for ergot. The action of the drug, when employed during the last stages of the expulsive period, is inferior to that of ergot; but it produces no tetanic contractions. When given during the lying-in, the effect was very satisfactory. But the author was particularly pleased with it in gynecological cases, in hemorrhages continuing after the removal of remnants of abortion. In myomata, the metrorrhagias often diminished as early as after two months, but usually after three, and a reduction in the size of the tumor could also be demonstrated. Infusions of the fresh drug produce the best effects. The American fluid extract is likewise to be recommended. The drug is considerably cheaper than ergot. In reply to a question by Schatz, the author added that the agent can by no means fully supplant ergot.

CORRESPONDENCE.

The New Battery Solution.

EDS. MED. AND SURG. REPORTER:—

The subject of medical electricity is so important that any discussion about it will be sure to be read with interest by many physicians. This induces me to make a slight criticism just now.

I have read a communication in the current number of your journal on "A New Battery Solution," by Carl Seiler, M. D.

Now, although I do not profess to be "well versed in the chemistry of batteries," I am strongly of the opinion that Dr. Seiler's explanation of the reaction which takes place is incorrect. It is the *oxygen* of the water which enters into combination with the zinc and sulphuric acid—the *hydrogen* being evolved in the form of small bubbles which adhere to the surface of the carbon.

Again, "chromic acid is not a de-oxidizer, but a powerful oxidizing agent, giving off a part of its oxygen freely on slight provocation. The chromic acid in the solution acts as a carrier of oxygen; being decomposed by the action of the sulphuric acid, it parts with some of its oxygen (which at once unites with the free hydrogen to form water) and becomes the sesqui-sulphate of chromium.

GAMMA.

Poisoning by Turpeth Mineral.

EDS. MED. AND SURG. REPORTER:—

In the *Medical News* of December 22, 1883, is recorded a case of poisoning from turpeth mineral. I have had a very considerable experience in the use of this agent. As a rule, no emetic with which we are acquainted is so efficient in croup. It removes the laryngeal obstruction with a minimum amount of nausea and prostration, at the same time retarding and, in some cases, preventing the reformation of the membrane.

But, I am sorry to add, I know of one case of death from its use, and of another where the symptoms occasioned the gravest anxiety. The fatal case occurred during the last summer. A child of about a year was attacked with true croup. In addition to a general treatment, two powders, three grains each, of turpeth mineral were left. One was to be given if symptoms of suffocation developed. If this produced no vomiting in twenty minutes, the other powder was to be given. Neither came up. In about two hours great restlessness and diarrhoea came on. The bowels were moved every few minutes. Paroxysms of retching occurred frequently, but no vomiting. The stomach was not empty. Collapse gradually supervened, and in a few hours the child was dead.

Allow me to add, that no doubt can be thrown about this case. The drug came from the same bottle which had furnished the supply for at least a score of cases.

In the other case referred to, one dose of three grains was given. No emesis resulted. Diarrhoea, paroxysms of retching, and intense abdominal pain resulted, but passed off under treatment.

As for myself, I shall use no more turpeth mineral. I cannot feel justified in adopting means that may act favorably in ninety-nine cases, and yet kill the hundredth. It is important that others having had fatal results from this drug should publish the same. MEDICUS.

—Baltimore is to have a Polyclinic and Post-Graduate Medical School.

NEWS AND MISCELLANY.

A Nut for Anti-Vivisectionists.

In the course of an article on vivisection in the *New Orleans Medical and Surgical Journal*, December, 1883, the late Dr. J. Dickson Bruns thus eloquently raps the anti-vivisectionists of England:

"Are any of the members of the Royal Society for the Prevention of Cruelty to Animals, sportsmen? If so, have any of them ever had the curiosity to go through the covers with the game-keeper a day or two after *abattue*? How many birds with broken wings, dying by slow tortures, have they picked up? How many hares limping about with mangled limbs, some mortifying, all inflamed and exquisitely painful, have they seen? Or what excuse will be offered for the barbarous amusement of fishing?—have trout and gudgeons and worms no feelings! And if man may claim dominion over the beasts of the field, and may hunt and destroy them, not for food or for support, but for the gratification of taste, or the relaxation of mind, or exercise of body, or in mere wantonness, without reference to the pain he inflicts, shall he be denied the occasional use of them for the advancement of the noblest work that can engage his energies, even though that use involves at times a suffering almost equal to that which the rod, the gun, and the trap inflict?"

"Out! with such puling sentimentality—such mockery of the divine essence of charity! If the Royal Society want some real beneficent work to do, let it go down into the reeking slums of Westminster, where Lazarus lies in rags, almost at the gate of the queen's palace; or into the still fouler atmosphere of St. Giles and Whitechapel, poisoned with every moral as well as physical abomination; or into the starving districts of East London, and feed the hungry, and clothe the naked, and give light to those who sit in the shadow of death. 'Are not these of more value than many sparrows?'"

"When Christian Englishmen were blowing Sepoys from the mouths of cannon, and murdering Princes in the face of day, and sacking cities with sickening outrages, the Royal Society uttered no protest. Let her batter at the doors of Parliament until the hand is taken from the throat and the knee from the breast of prostrate India, every foot of whose soil has been won by rapine and murder, from the days of Clive to Campbell. India! which, when the British savage was running wild in his unwhewn forests, was possessed of a civilization whose magnificence is still attested in the ruins of her gorgeous architecture, the brilliant fragments of her letters, and the mutilated body of a religion whose moral code is only inferior to that which our Master himself taught. When it has purged the common weal of such enormities, we will be more willing to listen to it on the minor canons of the law."

Annual Mortality of Philadelphia.

The published statements of the Registry Bureau of the Health Department of this city show that for the year included between December 30, 1882, and December 29, 1883, the number of deaths in this city was 20,076, an increase of but

17 over the death list for 1882. Of this total for 1883, 10,711 were adults, and 9,365 were minors. Of the latter number 4,929 were boys and 4436 were girls, and of the total there were 10,223 males, and 9,854 females.

The record of nativities shows that 14,909 were natives of the United States, 4,500 were foreign born, and the birthplaces of 667 were unknown. The people of color numbered 1,112.

The principal causes of death were as follows: Alcoholism, 91; apoplexy, 340; Bright's disease, 307; cancer, 401; casualties, 293; cholera infantum, 877; cholera morbus, 28; congestion of the lungs, 247; consumption of the lungs, 2,787; convulsions, 802; croup, 500; debility, 459; diphtheria, 996; heart disease, 709; malarial fever, 75; scarlet fever, 561; typhoid fever, 579; whooping-cough, 85; inflammation of the lungs, 1,282; inflammation of the stomach and bowels, 509; inanition, 414; marasmus, 816; old age, 767; paralysis, 389; smallpox, 173; teething, 22; and tetanus, 36. In addition to these there were 60 deaths from insanity, 17 murders, and 94 deaths were classified as suicides. Of the suicides, there were by hanging, 25; shooting, 22; poison, 25; drowning, 5; cutting of the throat, 16; and jumping from a window, 1.

Of the total there were under 1 year, 4201; from 1 to 2, 1874; from 2 to 5, 1832; from 5 to ten, 1037; from 10 to 15, 350; from 15 to 20, 561; from 20 to 30, 2044; from 30 to 40, 1816; from 40 to 50, 1643; from 50 to 60, 1553; from 60 to 70, 1,475; from 70 to 80, 1343; from 80 to 90, 719; from 90 to 100, 123; and from 100 to 120, 6.

Longevity of Medical Men.

The following eminent physicians and surgeons died last year in England at ages varying from 78 to 96: John Flint South, F. R. C. S., late President of the Royal College of Surgeons of England, and Surgeon to St. Thomas's Hospital, 85; George Samuel Jenks, M. D., Edinburgh, F. R. C. P., London, 93—he served in the Peninsula from 1812 to the end of the war in 1814, and at Waterloo; Price Blackwood Hallows, F. R. C. S., England, 81; Sir Robert Christison, Bart., M. D., D. C. L., LL.D., one of her Majesty's Physicians in Ordinary, Scotland, 85; John Francis De Grave, M. R. C. P., late Master of the Society of Apothecaries, 92; John Lonsdale Minshull, F. R. C. S., England, 81; George Macilwaine, F. R. C. S., England, 86; Sir James Alderson, M. D. Oxon, D. C. L., F. R. S., Physician Extraordinary to the Queen, and late President of the Royal College of Physicians, London, 87; Henry John Gore, F. R. C. S., England, 85; Staff Surgeon William St. George Davies, R. N., 96—he served as Acting Surgeon in the *Norge* at the bombardment of Copenhagen under Admiral Gambier and Lord Cathcart in 1807, and was in all probability the very last survivor of that engagement; Henry Bell, M. D., 85; George Gulliver, F. R. S., F. R. C. S., late Surgeon Royal Horse Guards, 79; A. E. Blest, M. D., Edinburgh, Indian Army, 85; Staff Surgeon Cotton, 87; Edward Greatrex, F. R. C. S., late Surgeon Coldstream Guards, 83; Edward Doubleday, F. R. C. S., 84; John Hawthorn, 86; Sir Thomas Watson, Bart., M. D., D. C. L., F. R. S., Physician in Ordinary to the Queen, and a former

President of the Royal College of Physicians, London, 90; Inspector-General Cross, R. N., 78; James Arthur Wilson, M. D., F. R. S., Senior Fellow of the Royal College of Physicians, 88.

Great Men and Small Heads.

The *Athenæum* says: "It is usually supposed that men of great intellectual powers have large and massive heads. But this theory, which Dr. Gilbert, physician to Queen Elizabeth, was the first to suggest, is not borne out by facts. An examination of busts, pictures, medallions, intaglios, etc., of the world's famous celebrities, almost tends the other way. In the earlier paintings, it is true, men are distinguished by their large heads; but this is attributable to the painters, who agreed with the general opinion, and wished to flatter their sitters. A receding forehead is mostly condemned. Nevertheless, this feature is found in Alexander the Great, and to a lesser degree in Julius Cæsar. The head of Frederick the Great receded dreadfully. Other great men have had positively small heads. Lord Byron's was 'remarkably small,' as were those of Lord Bacon and Cosmo di Medici. Men of genius of ancient times have only what may be called an ordinary or every-day forehead, and Herodotus, Alcibiades, Plato, Aristotle, and Epicurus, among many others, are mentioned as instances. Some are even low-browed, as Burton, the author of 'The Anatomy of Melancholy;' Sir Thomas Browne, and Dürer. The average forehead of the Greek sculptures in the frieze from the Parthenon is, we are told, 'lower, if anything, than what is seen in modern foreheads.' The gods themselves are represented with 'ordinary, if not low brows.' Thus it appears that the popular notion on the matter is erroneous, and that there may be great men without big heads."

An Improved Way to Dispose of Used-up Animals.

Mr. George Lam Fox, of London, has devised the apparatus: The animal to be killed, first has the top of its head and its feet and its legs wetted with salt water. It is then led into a stall and made to stand upon an iron plate connected with the negative pole of a condenser of a capacity of about one hundred microfarads. The operator then touches the animal's head with the positive pole, and it falls dead. The death is believed to be painless, because physiologists have demonstrated that a nervous vibration cannot be communicated to the brain in less than a tenth of a second, and another tenth of a second must elapse before a sensation can result from the vibration thus communicated. One-fifth of a second must, therefore, necessarily intervene between the actual infliction of an injury and the experience of pain from it. But the flash from such an apparatus as has been described, presumably paralyzes every fragment of a nerve in man or beast in something like a hundred-thousandth part of a second. It is said for about two thousand five hundred dollars such an electrical apparatus as is here alluded to may be fitted up in any stable or outhouse, and that it will kill as rapidly as animals can be placed in position and taken away again.

The Medical Society of the State of Pennsylvania.

The annual meeting of this Society will be held at Philadelphia on May 14, 15, and 16, 1884, in the Assembly Room of the Union League, Broad and Walnut streets. The President's reception and the entertainment by the Philadelphia County Medical Society will be held on the evening of May 14, at the Pennsylvania Academy of the Fine Arts, Broad and Arch streets.

The By-Laws require the programme of the meeting to be printed and distributed at least one month before the date of the meeting, and no voluntary paper is allowed to occupy more than twenty minutes in its reading.

Notice is hereby given that all those who wish to present papers should send the full title and a short abstract of the same to the Committee on Arrangements on or before March 1, 1884, in order that a varied and attractive programme may be prepared.

No paper will be selected for a position upon the programme of the meeting unless an abstract has previously been seen by the committee.

By order of the Committee.

JOHN B. ROBERTS, *Chairman*,
1118 Arch street, Philadelphia.

Insanity in France.

Recent reports show an increase in the number of inmates in the insane asylums in France. There are 103 asylums, of which 61 are private; 14 are for women only, and 9 for men only. In 1868 the number of inmates was 34,000, to-day it is nearly 60,000. This increase may be accounted for partly by referring to the fact that the attention given to mental disorders is much stricter than formerly. The authority from which these figures are taken also states that men are cured on an average in 276 days, and women in 295. The stay varies according to the cause of the disease, lasting 287 days in cases of simple insanity, 250 days for paralytic insanity, 289 days for senile insanity, and 398 days for idiocy and cretinism.

The Advantage of Koumiss.

In the course of an article by Adolf G. Vogeler, in the *Chicago Druggist*, the following occurs:

The reasons why good koumiss is so well borne by a weak stomach, and why it is so nourishing, are shortly these: The casein is so minutely divided that it is most readily attacked by the digestive fluids. Appetite is improved by the stimulating influence of carbonic acid on the mucous lining of the stomach.

Lactic acid being an essential constituent of the gastric fluid, the stomach is relieved of part of its work by the presence of that body in koumiss. And finally, the small percentage of alcohol increases the gastric secretions, and by increasing the force and frequency of the pulse, the muscular system is built up by the more generous supply of life-giving blood.

Personal.

—Dr. Wm. Thomson, of this city, has changed his residence from 1508 Locust, to 1426 Walnut street.

—Thomas Holloway, the millionaire manufac-

turer of pills, whose immense warehouse on Oxford street is one of the sights of London, is dead, aged eighty-four years. One of his latest acts was a gift of \$500,000 to the hospitals of London.

Items.

—A baked bean lodged in the vermiform appendix caused fatal inflammation in a resident of Lynn, Mass.

—Dr. John Beattie Crozier (*Lancet*, November 17, 1883), reports good results from venesection in uræmic coma.

—The *Lancet*, November 17, 1883, contains a report of a case where a cystic polypus of the rectum complicated parturition.

—In the *Lancet*, November 24, 1883, Mr. W. Collier reports a case of angina pectoris much benefited by nitrite of sodium.

—An interesting work treating of the history of the Salpêtrière from 1656 to 1790 has recently been published in Paris.

—In the *Boston Med. and Surg. Jour.*, December 6, 1883, Dr. D. D. Gilbert reports a case of "tubal gestation, with rupture and sudden death."

—The New England railroads have killed in the past year, two hundred and twenty-one persons, and injured five hundred and thirty-five.

—In the *Brit. Med. Jour.*, December 1, 1883, Mr. Startin reports a case of elephantiasis of the scrotum, which he considered to be due to an injury.

—Major J. S. Billings, of the Medical Department of the Army, has been placed in charge of the Medical Museum in Washington.—*New York Tribune*.

—This is the time to try whether the coating of windows with a thin film of glycerin—as recommended by the *Scientific American*—will prevent frosting in cold weather.

—According to Dr. Billings, it appears that of one million colored infants born (in Baltimore) one-half will have perished before attaining the age of two years.

—It is announced that the late Dr. Marion Sims has left a sketch, entitled "Lydia McKay and Colonel Tarleton," which will appear in the February *Harper*.

—Dr. Frank O. Stockton, of Newark, N. J., has been elected to the professorship of diseases of the nose and throat in the College of Physicians and Surgeons of Chicago.

—In the *Medical Times and Gazette*, December 15, 1883, Dr. Arthur G. Blomfield reports a case of fracture of fourth cervical vertebra, with immediate paraplegia and death.

—In the *Glasgow Med. Jour.*, December, 1883, Dr. John McDonald reports a case of severe cerebral concussion, in which large doses of the bromide of potassium averted death.

—In the *New Orleans Medical and Surgical Journal*, December 1883, Dr. J. J. Burroughs reports a case of Cæsarian section, with successful delivery of a living fetus; the mother died.

—A *patent medicine* "testimonial" says: "Five

doctors and gallons of medicine failed to cure me." He ought to be thankful they didn't kill him. It was a narrow escape.—*Norristown Herald*.

—According to the Chinese, the flesh of a black rooster strengthens the bowels, the tendons control deafness, the intestines cure incontinence of urine, and the blood of the comb increases the milk of nursing women.

—In a communication to the Académie des Sciences, M. Krechel has drawn attention to another method of adulteration of milk, which consists in adding to it an aqueous solution of commercial glucose having the same density.

—A case in which the middle phalanges of the index, middle, and ring fingers of the left hand were completely dislocated on to the dorsa of the corresponding proximal phalanges, is recorded in a recent number of the *France Médicale*.

—The whistle of a locomotive is heard 3,300 yards, the noise of a train 2,800 yards, the report of a musket and the bark of a dog 1,800 yards, the roll of a drum 1,600 yards, the croak of a frog 900 yards, and a cricket's chirp 800 yards.

—In the *Annales de la Société Médicale de Gand*, Drs. Van der Mursch and De Visscher describe the symptoms during life, and the results of the necropsy, met with in a child two years of age, who died in five hours from swallowing half the contents of a bottle containing 150 grains of nitrobenzine, procured by its mother for making pomade.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.:—

I have heard that china painting is injurious to the health. Do you think it is, and why do doctors say so?

LADY READER.

Ans.—It is alleged to be so, on account of the turpentine and lavender oil used. The fumes of these ingredients certainly disagree seriously with some people. But we regard them as exceptions, and do not believe that in most cases any danger attends the practice of this minor art.

—Is the certificate issued, upon examination, by the State Board of Health (Illinois for example) valid in other States where an examining board exists? I think it should not be ignored any more than a diploma issued by a "recognized" (viz., American Medical College Association) College of Medicine and Surgery.

J. T.

Ans.—We doubt if it would be received in another State but no test case has come to our knowledge.

—*Chemist, N. Y.*—We have no faith in anonymous analyses of quinine pills or anything else. Medical journals which publish such usually have "an axe to grind."

MARRIAGES.

ARMSTRONG—COOLBAUGH.—At the home of the bride, in Wysox, December 25, 1883, by the Rev. Hallock Armstrong, of Aspinwall, Addison Alexander Armstrong, M. D., of Austinville, and Miss Hattie W. Coolbaugh, all of Bradford county, Pa.

DEATHS.

URQUHART.—In this city, January 6, 1884, David C. Urquhart, M. D., in the seventy-second year of his age.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

WHAT IS MEANT BY NERVOUS PROSTRATION?*

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The popular conception of the condition now known as "nervous prostration" is a state of debility, in which nervous derangements predominate. A man actively engaged in business or in public life, presently finds himself unequal to his daily tasks; he suffers odd sensations in his head; his digestion is disordered; he is weak; wakefulness, mental depression, and a thousand and one new sensations of strange character and fearful portent, are superadded. The unfortunate subject of these ills now recoils from his work, gives himself up to the consideration of his symptoms, and relaxes his hold on the interests and occupations of his life. All the world declares that he has "nervous prostration," and this explanation satisfies. Physicians say "neurasthenia" or "hypochondria," according to their habits of mind or to their training. Sometimes this condition is called the "American Disease." Indeed, there is a general notion, widely prevalent, that neurasthenia is a peculiarly American malady. The late Dr. Beard was the apostle of this dispensation, and he not only was noisy and persistent in his advocacy of that view, but claimed, indeed, to have first clearly defined neurasthenia, and to have classified under this designation the numerous symptoms pertaining thereto. If we cannot

admit Dr. Beard's claim in its entirety, if we experience repulsion at his tremendous, but unconscious egotism, we are still compelled to acknowledge that his work in this connection is the most important that has appeared. He was peculiarly fitted to differentiate this malady by reason of the quickness and acuteness of his intellect, his power of analysis in its subtlest aspects, and his far-reaching, his omnivorous faculty for related facts.

The term *neurasthenia*, advocated by Beard, is by no means of recent origin. The corresponding French word, used in the same sense as we now employ it, has been a stock word of French neurological medicine for fifty years. Under the terms spinal irritation, hysteria, hypochondriasis, the nervous state, etc., symptoms of the same character as those now included in the word neurasthenia have been described. Besides the general state, similar derangements of functions of particular organs have been separately considered, as palpitation of the heart, headache, flatulence, impotence, etc. In the word neurasthenia—popularly, nervous prostration—the whole morbid complexus is included. The question I have to consider is whether this is a real, a substantive disorder. Are the notions now entertained about it founded on a true conception of the condition?

I need not enlarge on the importance of a correct understanding of a morbid state, which is supposed to be due to the conditions of modern, especially of American life. Without stopping now to question the soundness of the prevailing doctrine, I will place before you the clinical history of two cases, representatives of the two types of neurasthenia. These may be designated re-

*Read before the Philadelphia County Medical Society.

spectively as the *congestive* and the *anæmic* varieties. The latter are greatly more numerous, but the former are not uncommon, as Beard admits.

CASE I.—THE CONGESTIVE TYPE.

Mr. —, æt. 44, president of one of the largest railroad corporations of the West. He is now a robust man, five feet ten inches in height, 196 pounds in weight, and has a very dark complexion, his type of constitution being the so-called bilio-nervo-sanguineous. Beginning his career at an early age in a subordinate position, he has, by the force of a superior intellect and of a physique that no labor could subdue, risen to the highest office, and now controls vast interests. Ambitious, enterprising, resolute, he has carried these faculties into all his work, and has shrunk from no task, however severe—from no responsibility, however onerous. As he has risen in position, social engagements have also added to his burdens. His mode of life has changed to some extent. His habits have become more sedentary, although diversified by frequent railroad journeys; the pleasures of the table, including wine-drinking and late suppers, have been more and more indulged in: excessive smoking has been added to these indulgences; and thus, whilst his physical powers have been slowly impaired by bad hygiene, the demands on his mental powers have increased. Extensive interests, uncertain, often precarious, business arrangements, and the incessant watchfulness required when vast combinations may be wrecked through failure at any point, demand the highest use of every faculty; and thus to work is added worry.

Three years ago Mr. — observed that he was not feeling well, and that he could not work as before. He became dull, especially after meals, had a constant headache, dizziness and throbbing of the temples; he applied his mind with difficulty, and all of the head symptoms were increased by the efforts made; he had a good, rather a keen, appetite; a heavily-coated tongue, flatulence, constipation, and some colic pains. The bladder was rather irritable, especially at night; sexual inclination had declined with lessened power, and various ill-defined, but annoying sensations were felt about the penis, scrotum, and perineum. During the first year the symptoms increased; the attacks of vertigo were sometimes very severe, so that he had to support himself for a moment to save him from falling. On several occasions he became very much dazed, even lost consciousness momentarily, and once wandered some distance from the proper route he was taking. Anomalous sensations of creeping and crawl-

ing, coldness and tingling, and often a burning heat, were felt in the scalp; sudden detonation in the centre of the head apparently; buzzing and singing in the ears, and very constant headache, were also experienced. In the extremities, the tongue, and the genitals, there were felt peculiar tingling, numbness, coldness, creeping, and similar sensations. During the whole time of the existence of his symptoms, Mr. — suffered from depression of spirits, a deep melancholy in fact, and he lived in constant apprehension of failure of mind.

Physicians whom he consulted in the West, located the malady in the brain, diagnosed cerebral hyperæmia, the prelude to softening.

When Mr. — came to see me, sixteen months ago, the symptoms just detailed continued, and were rather increased than diminished. The objective examination furnished the following details:

His face is full, the eyelids puffy, and the lower lid swollen into a bag; the conjunctivæ are injected, the sclerotic muddy, and the pupil sluggish in movement. On ophthalmoscopic examination, the fundus is seen to be injected, small vessels prominent, veins swollen. There is no optical defect except that due to his age. The membrana tympani is also rather deeply red, and vessels too small to be seen under ordinary circumstances are now in view. Hearing is unaffected. Motility, sensibility—the tactile, pain, and temperature senses—are unaffected; and the reflexes remain normal, although probably a little sluggish. The electrical reactions are normal.

His tongue is heavily coated, the breath foul. His appetite is good, but a sense of fullness at the epigastrium persists for several hours after meals; acidity and eructations of rather foul gas now and then occur. The stools have the normal appearance—consistence, color, and odor. The urine is copious, acid, specific gravity rather high (1025 to 1030), and there are traces of sugar, as is usual under such circumstances.

The action of the heart is good, the pulse regular, the tension of the vessels rather high. The respiratory movements and murmurs are normal. The area of hepatic dullness is rather enlarged, and the splenic dullness seems also to be increased.

Subjectively the following symptoms are experienced: Various strange sensations in the scalp; a persistent headache; blurred vision at times; vertiginous feelings occurring irregularly and of varying severity; despondency, vague apprehensions; fear of places, especially of crowded assem-

blages; difficulty of deciding questions, very trivial or otherwise, in place of former promptness; impaired memory, for persons, names, and things.

Notwithstanding this extended list of symptoms, Mr. — did not have an ill look, but, on the contrary, on superficial examination, appeared to be robust. To him and to his immediate family the situation seemed in a high degree alarming. The surrender of his position and his business interests was regarded as imminent. To the apprehension awakened by his head symptoms was added the diagnosis of cerebral congestion, and hence the profound melancholy into which he was plunged.

Commentary.—My conclusion was that the disturbances in the functions of the brain and nervous system were secondary to derangement of the assimilative processes—of the primary and secondary assimilation—and that to the functional disorder thus caused are added the effects of introspection, and the realization by the centres of conscious impressions to an unusual extent, of ordinary peripheral excitations. My reasons for coming to this conclusion will appear hereafter. The remedies consisted in a careful regulation of the diet, in baths, exercise, in a reduction of the hours devoted to work, but not the cessation of work; in the use of a laxative quantity of sodium phosphate daily, and in the administration of the aqueous extract of ergot, with the chloride of gold and sodium, and a minute quantity of bichloride of mercury. If time and space would allow, the details of the hygienic management—so important in these cases—could very profitably, I think, occupy our attention. But I must pass on to the next case.

CASE II.—THE ANÆMIC TYPE.

Mr. —, æt. 57; a lawyer by profession. His type of somatic constitution is *nervo-sanguine*; weight, 145; height 5 feet nine inches. He has immense mental energy, extraordinary quickness of perception, a capital logical and critical faculty, and fine oratorical powers. These native abilities, conjoined with extensive cultivation, soon placed him amongst the foremost men at the bar of the city where he practiced, and have long maintained him in that position. For many years he has been a dyspeptic, and suffered much from eructations of gas, from acidity and flatulence. At times—months, even years intervening—he has experienced very severe seizures, accompanied by extreme mental depression, alternating with an extreme mental exaltation. During the past five years he has had two attacks of gout, neither

severe nor protracted. During the whole course of his professional life he has sustained no reverses, encountered no other anxieties than those of a successful lawyer, and has been rather singularly free, indeed, from the worries of life. Receiving last summer the nomination as a candidate to an important office, this cultivated gentleman, scholar, and lawyer, this man of nice tastes and high tone, entered on a canvass marked by vituperation and slander to an unusual extent. About the same time some business interests became entangled, and caused no little worry. During the campaign he visited some malarious districts, and spoke several times at night in the open air. A speaker of great readiness and power, he never suffered from any considerable fatigue after public speaking, and hence he was now surprised to find himself exceedingly tired even after a brief effort. He began to have drenching night-sweats, lost his appetite, grew weak, and was compelled to return home. It was then ascertained that he had malarial fever, and he was treated accordingly. But at this time, and subsequently, symptoms not necessarily of malarial origin appeared. He became frightfully dyspeptic, had enormous eructations of gas, and very considerable flatulence; his arms and legs had a numb feeling, attended with “pins and needles;” he walked with some difficulty, partly because of weakness; he was somnolent and slept a good deal, and his spirits were extremely depressed, especially on awaking in the morning. During these periods of depression he was so overwhelmed with despondency that he was apprehensive he would lose his self-control entirely.

When he placed himself under my charge, he had still a slight daily paroxysm of fever, the exacerbation occurring in the morning, but this disappeared in a few days under the action of some efficient doses of quinine. He was very weak, pallid, and emaciated, and slept a good deal of the time. He had no headache; his vision was rather dull, and ideas and speech slow. Every morning on awaking he was profoundly melancholic, and all the annoyances which the campaign had developed were gone over in his mind. He could talk of nothing else, think of nothing else, than his ill feelings and the disagreeable political and personal slanders of which he had been made the victim. He complained much of the numbness of his hands, of weakness in the limbs; and he talked incessantly of his depressed feelings. The bladder became irritable, and he was compelled to rise every two or three hours, during the night, the urine being acid, and depositing heavily of

uric acid. Presently the somnolence was displaced by insomnia, and he slept less and less, and rose in the morning haggard, exhausted, and horribly nervous and depressed. Ordinary hypnotics proved unequal to the effort to force sleep, and increasing doses of chloral became necessary. His mental activity, heretofore so remarkable, declined, and the effort to force his mind to the performance of any work, such as letter-writing, caused a sensation of fatigue. He also became undecided, even in small matters, ceased to have any inclination to go out and mingle with the public, and grew more and more averse to political movements. He reached a point finally when to meet strangers caused him great distress, excited the circulation, and induced a cold sweat.

As it became indispensable that he should resume the canvass, he made a strong effort, and notwithstanding the fatigue, mental and moral depression and exposure of public speaking, handshaking, and other matters of political expediency, he actually improved somewhat. The insomnia, irritable bladder, and hypochondriasis, however, continued, but to a less degree. In a few weeks, by means chiefly hygienical, I succeeded in stopping the chloral; natural sleep was resumed, although it remained somewhat fitful. Suitable dietetic regulations, baths, exercise and medicines, *pro re nata*, removed, or at least greatly modified, the principal symptoms. Two weeks at Atlantic City accomplished no little good, and when he returned to Philadelphia last week he appeared to be nearly his old self.

Commentary.—In this case we have exhibited that complexus of symptoms entitled neurasthenia or nervous prostration in its anæmic form, produced by several factors—moral and somatic. The moral were very influential, but unless the conditions producing bodily depression had occurred, the former causes could hardly have effected such results. Long-standing dyspepsia had prepared the way; malarial intoxication and fatigue contributed an important series of changes, and upon this weakened bodily state were precipitated crushing moral influences.

These cases, whose histories I have just read, are typical—each is the representative of a group. The causes are complex; the effects are not limited to one organ, or set of organs, but involve the system in general. To name this malady from the disturbance in one system seems to me an error, unless the definition is sufficiently elastic to include all the functions affected. Neurasthenia names one, only, of the parts involved. To entitle this the “American Disease,” is a strange

misnomer. It might with more propriety be called the “French Disease,” for a condition known as “the nervous state,” as “nervism,” as “neurasthenia” and similar terms, has been recognized and frequently described by French writers from an early period in this century. In France have existed the causes in the most influential form. The frequent political convulsions, the exacting social life of the great cities, and the harassing struggle for existence inseparable from the state of the great mass of the population, induce—if any mere external conditions can—that which is called nervous exhaustion. There are two factors supposed to be especially influential in this country—work, and our exciting political and social life. I believe that the effect of these is greatly overrated.

The brain, of all the organs of the body, illustrates, in the most perfect manner, that which has been happily styled “the principle of least action.” That is, to execute given tasks, it expends the least possible force; or, to express the same idea in another form, its work is done with ease, with the minimum of effort. Given a certain amount of repose—sleep—and supplied with proper nutriment—healthy blood—the brain will do its allotted work continuously during its working—the waking—hours. So far from being injured by severe labor carried on under normal conditions, the brain is improved by it. Mental activity, like muscular exercise, keeps the brain in a healthy state. When, therefore, a man says he is suffering from the effects of mental overwork, I want to know what his vices are. Worry may be one of these. Worry is exhausting. The worries of life do infinitely more harm than the work of life, how onerous soever it may be. The cases I have just read illustrate this.

I deny that life is more exciting on this side of the Atlantic. The one prize of life is money, and to get possession of it is the supreme purpose, to the attainment of which every energy is put forth. Is it less so elsewhere? Who are the peoples that despise money, and make no effort to obtain it? Here life is less exciting, because our political condition is stable, and but comparatively little exertion is required to secure a comfortable subsistence. I am speaking now of the mass of the population, and not of the few consumed by the ambition for political and social distinction, or led by a pitiless greed. It is the very ease and luxury of our American life that cause mischief. It is the indulgence in eating and drinking, the abuse of alcohol and tobacco, sexual excesses, sedentary habits, and too lux-

urions lives generally, that induce the state of the system called nervous exhaustion. If I had time, each of these should be considered, in relation to this subject. In the first case I narrated, the pleasures of the table and disordered assimilative functions caused the trouble. In the second case, dyspepsia, malarial toxæmia, and unusual fatigue, were the pathogenic factors. In both, the effects of these causes were increased by moral influences—in one, the anxieties involved in vast business enterprises; in the other, the excitement of a hot political contest. These moral causes would have had no injurious effect, had not the somatic conditions been unfavorable.

I come now to the most difficult part of my subject. I have to answer this important question: Why are the somatic derangements caused by the conditions referred to, in some cases accompanied by the mental and nervous symptoms which belong to neurasthenia? Why do some objects with indigestion and assimilative disorders, or with the results of dyspepsia and malaria, suffer from derangements of the mental and nervous functions, and not others? I might here take refuge behind an accepted generalization, and say that the presence or absence of the neurotic type of constitution explained the difference in the result. There is aptness in this explanation, but it is not entirely adequate. There is a mental condition of great importance, and unless we comprehend this, we fail to realize all the possibilities of the nervous side of these cases. I, however, barely hint at the main points, under these circumstances. Besides, I wish to avoid a too metaphysical discussion of the subject.

In the conduct of life every man who has a position to make or to maintain, exerts a certain moral force to hold himself up to his work. Some men are so happily constituted that they are quite unconscious of the effort and stand in front, serenely confident. Others are all the time laboring; they feel it and know it, and like the soldiers of Thomas's corps at the battle of Chickamauga, sorely pressed, now and then looked back, to see whether their grim and resolute commander was still behind them with his invincible courage, men conscious of the effort making to keep up, need but little excuse to surrender themselves to their sensations. At the present time nervous prostration is much feared; its symptomatology is a common subject of discussion; and hence, familiar with its character, a man who is arrested in his career by some of the ailments supposed to belong to it, his imagination readily supplies the rest. When a man begins the study of his bodily

sensations, having a certain model in his mind, he has little difficulty in filling out the details. All the world knows that when the attention is strongly fixed on an organ of the body, functional disturbances of it ensue, and finally structural changes may be induced. No part of the body is without sensation, even in health. To perceive these sensations the attention needs to be withdrawn from external things, and concentrated on the part. Thus it is when the subject of neurasthenia pursues his introspection; he becomes conscious of numerous sensations, which, because now felt for the first time, are new. Under these circumstances, also, the seat of conscious impressions becomes more acutely perceptive, Suggestion adds its quota of symptoms.

To the indefinite and multiplying nervous symptoms developing thus subjectively, must be added the reflex. Headache, vertigo, *tinnitus aurium*, amaurosis, diplopia, hallucinations and illusions, defects of speech, paralysis, are reflex symptoms on the part of the brain; palpitation, intermittent pulse, angina pectoris, laryngismus stridulus, asthma, are amongst the reflexes of the respiratory organs and heart; neuralgia, anæsthesia, and other disorders of the sensory nerves, and local paralyses, affections of the motor nerves, included amongst the nerve reflexes, may all be dependent on reflex excitations proceeding from the stomach. Indeed, there is no symptom in Beard's catalogue of those belonging to neurasthenia that may not be due to merely reflex influences having their initial seat in the digestive apparatus. It follows that the term neurasthenia, or its common equivalent, nervous prostration, is either inadequate, or it expresses too much: inadequate if the complex of symptoms includes the functional disturbances of all the organs affected—expresses too much if the malady is a merely nervous one.

In reply to the question: "What is meant by nervous prostration?" I respond, "a disease usually functional, situated in one or more organs, during the course of which reflex disturbances of the brain occur, and numerous subjective sensations in all parts of the body are realized by the consciousness."

I deny that neurasthenia is a primary nervous affection, or that it is a substantive disease. I hold that it is symptomatic and secondary.

This conception fixed in the mind, the treatment of neurasthenia is successful or unsuccessful according to the measure of our skill in localizing the initial disturbance, and in addressing our remedies to that, as well as to the general state.

SOME POINTS CONCERNING SANGUIS BOVINUS EXSICCATUS (DESICCATED BLOOD).

BY F. E. STEWART, M. D., PH. G.,
Of Philadelphia.

I see that the fifteenth edition of the United States Dispensatory, recently published, gives me credit for the introduction of sanguis bovinus exsiccatus (desiccated blood), as a Method of administering iron. As that is only one of its uses, and by no means the principal one, I beg leave to call attention to the following brief summary of what I consider to be the true position of this valuable agent in therapeutics.

Sanguis bovinus exsiccatus is a concentrated nutritive tonic prepared directly from the blood of bullocks, by simply drying it at a low temperature, to prevent the albumen from coagulating by the heat, and in shallow pans. The product, when so prepared, is in the form of thin scales somewhat resembling the scaly salts of the pharmacopœia. The blood may be prevented from clotting by stirring it before drying, and removing the small portion of fibrin that attaches itself to the stirring rod, or by adding a small portion of acid to the blood before submitting it to the desiccating process.

The article thus prepared contains all the elements of the blood, and in a form for easy assimilation; but, more than this, it contains potentially all that vast amount of energy required to raise blood from the plane of elements and of chemical compounds to that of animal life. It is, therefore, not only an agent for building and repairing tissues, but is, at the same time, a fuel, and its combustion in the system is capable of generating a large amount of vital energy for carrying on the vital processes.

Furthermore, this article contains iron in that peculiar combination found in the blood, and this form, so far as known, can only be manufactured by vital chemistry. The important relation that iron bears to the health of the red blood corpuscle, and the special relations borne by the red corpuscle to respiration and to the nervous system, are well known, and, together with the facts already stated, will probably account for the great benefit following the administration of desiccated blood, even in quantities too small for the credit to be entirely due to the albumen which it contains.

Indications for Use.—Desiccated blood has been used with benefit in wasting diseases; in various cachexia, such as scrofula, consumption, and syphilis; in anæmia and chlorosis; in atonic dyspepsia; after hemorrhages and exhaustive discharges; in the height of the fever process to

supply the combustion of tissues incident thereto, and to forestall a prostrated condition endangering life from exhaustion; in convalescence from fevers; and as a "building up" measure in surgical cases before operations, and after operations to hasten the reparative process. It is indicated in all cases where it is desirable to give iron, but more especially whenever the problem is to give food.

If quickly dried, this product is odorless, and almost entirely devoid of unpleasant taste. It may be administered either by the mouth, or by the rectum; preferably, however, by the former method. When administered by the mouth, it may be prescribed in combination with glycerine, with glycerine and brandy, or simply in solution with water. In either case the blood should be first dissolved in water. A very good formula, suggested to me by Dr. Andrew H. Smith, of New York, is the following:

R. Sangu. bov. exsiccatus,	℥vj.
Aquæ,	fl. ℥iv.
Misce ft. sol.	
Adde spts. vin. gal. et glycerinæ	
ana ana.,	℥j.
S.—Tablespoonful three or four times daily.	

In fever cases, when the temperature is high, I am in the habit of giving a teaspoonful, or more, as the stomach will bear it, every hour, carefully watching the dejections to see that it is all assimilated; and its use in this manner has been followed, in a number of cases, by the most gratifying results. In some cases, however, it is not assimilated, and stains the dejections black. In such instances, the addition of pepsin will usually remove the difficulty. As a disguise to the taste, I have been in the habit of employing some of the essential oils, a few drops of which will answer the requirements.

With regard to the use of blood per rectum, I have found that in some cases it is readily absorbed, and in other cases absorption does not take place. The reason for this I have never been able to ascertain. Pepsin should always be added to the solution when difficulty of this kind is experienced.

A point or two with regard to making a solution of desiccated blood. When preparing an aqueous solution, *never pour the water on the scales; always pour the scales in the water.* This point cannot be too strongly insisted upon. Then stir with a glass rod or spatula until dissolved, taking care to prevent the agglomeration of the scales into a mass. Again, always use *cold* water in forming the solution. Blood contains a large proportion of albumen. In fact, the dry blood is almost all albu-

men, and albumen coagulates at a temperature of 160° F. There is about as much sense in attempting to dissolve dry blood in hot water as to attempt the solution of an egg in the same medium. In either case the albumen coagulates and becomes hard. If a little more attention were paid to this well-known fact, we would hear less of those displays of stupid ignorance on the part of certain individuals, who have attempted to dissolve desiccated blood in boiling water.

For rectal use, the solution should be gently warmed before injecting, taking care not to raise it to a sufficient temperature to coagulate the albumen.

SOME OF THE USES OF ELASTIC PRESSURE.

BY J. S. MANNING, M. D.,
Of Manchester, Ky.

The great value of the elastic bandage became widely known to the profession through the labors of Esmarch. By the employment of graduated pressure, he was enabled to drive the blood from an extremity to the rest of the body, thereby enabling the operator to see his work and accomplish his undertaking thoroughly. There was now no longer need of undue haste, because the vital fluid was not ebbing away, as had been the case after the ordinary methods, and the surgeon might see as well as feel in his deeper dissections.

With the assistance of the elastic bandage, operations were successfully accomplished that without it had been considered impossible.

It is with a view of extending the knowledge of the usefulness of elastic pressure as a therapeutic agent that this article is penned. If a brother physician should find anything practical herein, whereby he might relieve suffering humanity of some of the many ills that weigh it down, the object of its mission will have been fully accomplished.

The uses of elastic pressure in varicose veins, and in aneurisms and chronic ulcers, are familiar to the reading part of the profession. Of course, no one undertakes to treat these disorders without resorting to pressure as the essential element of success. A far more extended use of graduated pressure should be adopted by the profession. In all incipient inflammations, judicious pressure, wherever available, would be of much benefit. To particularize: An incipient whitlow upon one of the digits may be aborted by using a narrow bandage of elastic tape or pure rubber. Apply the bandage with moderate and equable pressure from the distal extremity till it reaches

the proximal side of the seat of the whitlow. The pressure should not be sufficient to drive all the blood out of the extremity, but enough to relieve congestion and reduce the swelling. Now, if stasis and necrosis of tissue have not already taken place, the inflammatory products will be absorbed, and all will be well again. The principle of its action is simply that pressure produces absorption, first of inorganized products or adventitious growths; and second, of healthy tissues themselves, producing atrophy.

Again, the principle above enunciated may be employed in the treatment during the early stage of inflammations of the joints, as wrist, elbow, ankle, or knee joints, whether these be due to traumatic causes or constitutional tendencies. Elastic pressure gives support to the walls of the vessels, exudation of lymph corpuscles ceases, so much as has already exuded is taken up, and circulation is carried on through natural channels. Of course, if stasis has occurred, a slough formed, or a pus cavity produced, pressure will become an agent of evil instead of an agent of good, unless the pus be evacuated.

Elastic pressure has an application in an important class of cases not yet generally adopted by the profession, namely, in inflammations of the mammary gland. The text-books teach in threatened abscess of the mammary gland that strapping with narrow strips of adhesive plaster is the proper thing to do. If this strapping has ever been accomplished to the satisfaction of the operator, it has been outside the experience and observation of the present writer. Orthodox treatment has been painful, protracted, and inefficient, and this whole business is a standing reproach to the profession. The treatment of these cases of threatened mammary abscess by means of elastic pressure may be conducted quickly, safely, pleasantly. Take a piece of rubber dam, known among dentists as coffer-dam, about eight inches square, perforate the centre with a hole large enough to admit the nipple of the affected breast. Tie four tapes, one to each of the four corners of the rubber dam. Pass the nipple through the perforation, and carry the tapes around the body and over the shoulders in such manner as will press the gland equably and firmly against the ribs. This pressure, in the first place, supports the breast as in a sling, and removes the pain due to sense of weight and dragging. In the second place, superfluous blood is driven back into the circulation, thereby relieving the congestion. In the third place, the lacteal secretion is forced along its natural channels, to be discharged at the

natural outlet, either spontaneously or by a little coaxing with the breast-pump. This appliance in no way interferes with the use of belladonna ointment or other embrocations, and, of course, constitutional treatment would meet the indications as they arise. This same appliance to a secreting, but not inflamed gland, would cause the lacteal secretion to disappear in a few days. If the inflammation has gone on to suppuration, after evacuating the pus, the application of elastic pressure would greatly relieve suffering and hasten convalescence.

In considering the extreme frequency of inflammations of the mammary gland, the protracted suffering to which every victim of mammary abscess is subjected, the inefficiency of all treatment heretofore recommended, any plan that would control the suffering, and restore this important gland to its functions, must be hailed with delight by every lover of his race. Certain it is, if proper care and watchfulness be exercised with the means mentioned above, no case of incipient inflammation of the mammary gland need go on to suppuration; and if suppuration have already taken place, weeks of suffering may be saved by the judicious use of elastic pressure.

It is not supposed that a tithe of the uses of elastic pressure have even been hinted at, but a few thoughts on this subject reaching so many readers through the columns of a widely-read journal may develop facts from other sources, and may redound to the good of the profession.

A BROKEN SQUIER'S VERTEBRATED CATHETER REMOVED FROM THE BLADDER WITH A BIGELOW'S EVACUATOR.

BY WILLIAM A. BYRD, M. D.,
of Quincy, Illinois.

Before the introduction of Nelaton's soft rubber catheter to the notice of the profession, catheterization of a patient with hypertrophy of the prostate gland was an operation requiring considerable skill and tact in the operation, many times the operation failing for the lack of instruments with special curves. To obviate this difficulty Dr. Squier invented a catheter made up of short silver tubes, fitting over each other and moving one upon the other, somewhat like the vertebrae of the spinal column. These were connected to a long tube for the distal extremity. Through all passed a rod with a chain upon the proximal end. The catheter was made more or less flexible by tightening or loosening a nut at the extremity of this rod. This catheter was an admirable arrange-

ment for patients that required their urine drawn twice a day for any considerable time, as it permitted them to use it without the skilled aid of a surgeon, something that few were able to pay for for a great while. It could not but strike most surgeons that there was great danger from the use of such an instrument if it was not kept in perfect order, otherwise rust would destroy the chain, or the rod it was attached to, permitting the vertebrae to drop into the bladder.

November 20th, I was telegraphed for by Dr. Daniel Ellis, of Augusta, Illinois, to come up to remove a catheter in a man's bladder. When I arrived, I found that the patient lived several miles in the country. We started; that is, Drs. Daniel Ellis, R. J. Grigson, James Ellis, a medical student, and myself. We arrived at the patient's house about midnight, and found a very intelligent gentleman of 71 years, anxiously awaiting us. We put him under an anæsthetic, that is, a mixture of, by measure, chloroform three parts, bromide of ethyl one part, and alcohol four parts, of which about one and a half drachms was given through a Hutchinson's inhaler. Though prepared to perform perineal section, I thought I would see if the catheter could be removed with a Bigelow's evacuator, having one of Dr. Bigelow's latest instruments with me. I inserted a curved catheter of No. 19, American gauge, and attached the aspirator; at the third aspiration, in less than one minute, the silver vertebrae, chain, and part of the connecting rod, were deposited in the catch-basin. We left the old gentleman feeling quite comfortable an hour later, and came into Augusta in time for the early train home. The old gentleman had had an attack of retention of urine with over-distention of the bladder some two years before. Dr. Ellis was sent for, and removed three quarts of urine with the catheter. From that time the urine had to be drawn night and morning. He used Nelaton's catheters for relief, but they became useless in a short time, on account of not having the oil washed off after each time of their use, and he found that a Squier's catheter, that he obtained of Dr. Grigson, passed much more easily than a rubber instrument. Dr. Grigson found one of the links of the chain in his instrument so eroded when it was returned to him, that it broke while handling it. Another instrument of the same kind was obtained, and this it was that broke when he started to withdraw it after using it. The rod had become eroded about half-way down, and broke into two pieces.

The catheter might have remained sound and

useful much longer had it been carefully washed and oiled after each introduction, but the friction of the links of the chain causes a rapid wear, and renders the instrument extremely liable to break, and of course is very dangerous to the patient. Nothing could have excelled the evacuator for the removal of the pieces of metal, and the patient was saved from undergoing a dangerous operation. with a lingering recovery.

416 Jersey street.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE.

BY LEWIS A. SAYRE, M. D.,

Professor of Orthopedic Surgery to the College.

Reported by EDWARD DEVELIN, M. D.

Spondylitis. *Clinic by*

Sayre
GENTLEMEN: This little child that I now present to you is suffering from spondylitis in the earliest stage.

The parents and other members of the family are perfectly healthy; and this child, beyond the difficulty of the spine, presents a remarkably robust appearance. I am informed that she commenced to complain of pain in her back and side, and of considerable difficulty in breathing, some six months ago, becoming restless, nervous, and irritable. Previous to this she had injured herself in falling from a chair. You will notice that there is a projection of the spine at the eleventh dorsal vertebra, and that as she stoops down to pick anything up from the floor, she avoids bending the spine, but flexes the legs upon the thighs, and the thighs upon the abdomen, thus squatting down and maintaining the spine in the erect position.

Now, as I lay the child upon her abdomen across my knees, the thighs and arms hanging down on either side, as you see, I slowly separate my knees, and in this manner make gradual traction, by this means extending the spinal column, and relieving the diseased surfaces of the vertebrae from pressure, and thus free the child from pain, as you observe the instantaneous change in her manner of breathing; from the short, quick, jerky respiration, to a deep, full, long inspiration, and the child seems perfectly comfortable. Now by drawing my legs closer together, you notice the immediate return of the previous spasmodic breathing; and now placing one of my hands upon her head, and the other upon her buttocks, and pressing the vertebral column together, she immediately begins to cry with the pain produced, and there is at the same time an instantaneous spasm produced in her legs. Now by gently separating my knees again, and extending the spine, her sobbing ceases, and she states that she is quite comfortable again. You now observe that I am making firm pressure over the spinous processes at the seat of the disease,

and, according to all authorities, this should increase the pain; whereas, as you can plainly see, it does not do so. But, on the contrary, when slight extension is made upon the column, and direct pressure with your finger over the projecting spinous processes, there is rather a tendency to relieve the pain, by opening the angle of pressure in front of the vertebrae.

I have found that in these cases of antero-posterior curvature of the spine, by placing the child in this position, and gently pressing downward, at the same time making your traction as I have just described, you relieve the patient. The explanation, to my mind, is simple enough, viz: by these two manipulations (the disease being situated in the anterior portion of the vertebrae), you relieve the inflamed surfaces from pressure, and, as it were, separate the anterior edges of the vertebrae from each other. This latter, of course, is an impossibility, but at the same time sufficient force is brought to bear by your combined manipulations to relieve the diseased surfaces from pressure, and hence the cessation of pain.

This examination we have now made will reveal the disease if it be in the anterior part of the bodies of the vertebrae; but there may be some cases in which the examination we have just made will reveal no evidences of disease at all, and at the same time there may be spondylitis existing. But by a more careful examination you will find the disease upon the side of the bodies of the vertebrae, and it has been caused by some blow or pressure upon the ribs, driving the heads of the ribs into their facets. You detect the disease in this position by pressing upon each rib separately, and the moment you come to the point of disease the patient will flinch with the pain induced by your pressure.

Having now made our diagnosis, I call your attention to the treatment of the case. I shall here apply the plaster-of-Paris jacket and *jury mast*: and will now show you the method of its application.

The child has already been thoroughly cleansed, and we put upon her a skin-fitting knitted woollen shirt tied over the shoulders, manufactured expressly for this purpose by the Bickford Knitting Co., 841 Broadway, this city. We now fold two towels and pass under the shirt in front, allowing them to extend the full length of the trunk. This is to prevent pressure upon the viscera, and allow of free respiration and expansion of the abdominal walls after eating; these towels being withdrawn as soon as the plaster has become sufficiently set. Having now adjusted the towels, the shirt is drawn down tightly and secured between the legs with a safety pin, and your patient is then ready for the partial suspension necessary during the application of the plaster-of-Paris jacket.

The child we now place in the suspending apparatus (see Fig. 1), which you will notice consists of an iron cross-bar with a chin collar of soft leather, and arm supports also. Having carefully adjusted this so that the weight of the body is borne evenly upon the arm-pieces under the axillae and the chin collar which supports the head, we make gradual traction upon the vertebral column until our patient states that she is perfectly easy and free from all pain. In this case you will no-

tice that the traction necessary to secure this result, is sufficient to slightly raise the heels from the floor; in some cases this is not necessary, and again in others the traction required may be still

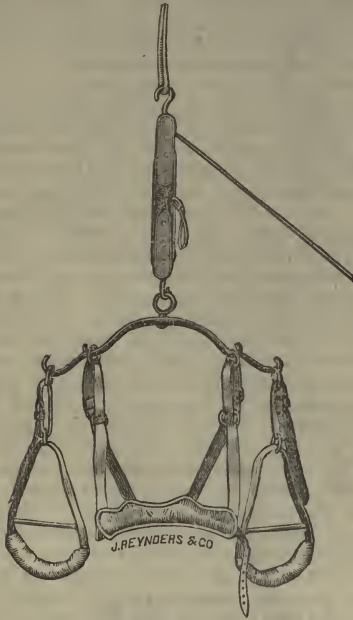


FIG. 1.

greater; but never under any circumstances should your traction be so great as to lift your patient *completely from the ground*. This I desire you to specially understand, otherwise the word *suspension*, used in our description of the treatment, may lead you to suppose that the patient is to be literally suspended, when in reality it is but *partial suspension*.

This child then is fully prepared for the application of the jacket, and I will at once show you the manner in which it should be properly applied. You will here notice that I have from eight to twelve rolls of bandages formed of crinoline, into the meshes of which the dry plaster of Paris has been well rubbed and then rolled up moderately loose; not by any means as tightly as the ordinary roller bandage used in surgical dressings, but sufficiently tight to retain the plaster in the fabric, and at the same time allow of it becoming saturated to its centre rapidly when placed on the water. These bandages vary from two and a half to four inches in width, and also being from three to four yards long, depending upon the size of the patient.

I now place a roll of the bandage in a pail of tepid water, which is sufficiently deep to cover the bandage when standing upon its end, and then wait until it has become thoroughly saturated, which is shown by the cessation of the escape of air from the water. I again place another roll in the water, that it may become saturated while I am applying the one previously immersed. This one, as you observe, I now remove, and pressing

out all surplus water, I carefully wind it around the waist of the child, my two assistants rubbing each layer of the bandage well into the preceding one. I would here call your attention to the manner in which I commence the application of the jacket, viz., at the waist, gradually going down until I come to just above the great trochanter. Then carefully reversing the bandages, as you see, I pass upwards again, and having secured sufficient thickness at the waist, I then pass on up the trunk, until I am on a line with the axillæ, and a little higher in front over the chest, and also higher over the scapulæ at the back. In some cases you will find it necessary to put padding between the shirt and your plaster bandages, over the sacrum and crests of the ilii, and also on *either side of the projection of the vertebra* where the disease is located, in order to prevent excoriation of these parts. But never put any padding upon the projection of the vertebra, but place it upon either side, to prevent pressure upon that point. If you fail to do this and allow of pressure to be made there, it may result in a painful ulcer, which will delay your treatment many months: for if such an ulcer should be started the jacket must be at once removed and the patient placed in bed, until such time as it shall have healed, when the jacket may be again applied. I do not wish you to under-estimate the importance of this careful padding. It is not the plaster-of-Paris that is going to effect a cure of this disease, but your skill in its application, and formation of a jacket by its use which will support and relieve the diseased surfaces from pressure, until such time as all morbid changes have been checked, and a healthy action set up in the hitherto diseased parts.

Now, in this case, although the disease is low down, I shall apply the *jury mast*. (Fig. 2.) In some



FIG. 2.

cases where the disease is so low down, I have

omitted the jury mast, as its appearance is oftentimes objectionable. My friend, however, Prof. Samuel W. Gross, suggested that it be used in those cases in which the disease was low down as well as high up in the spinal column, and stated that he had secured much better results in its general application. I most heartily endorse his suggestion, and now apply it in almost every case of spondylitis.

You have observed that I have now shaped the lower portion of the *jury mast* to the back of the child, the lower part of the instrument consisting of these two iron strips which pass upon either side of the spine to the exact contour of the child, and it is now placed in the centre of the body, the bars running up on either side of the spine, the strips of perforated tin which you here see passing from the iron bands two-thirds around the body of the child. My assistant now retaining this firmly in position, the central rod running over the back of the head to the vertex, we again continue the application of the plaster bandages until the lower portion of the instrument is securely embodied in the jacket, my assistants, as you observe, rubbing each layer of the bandage into the preceding one.

You have now seen how simple the method and easy the application of the plaster-of-Paris jacket is. This child should now be laid upon an air bed, but as this is not at hand, we must substitute the ordinary hospital bed, and allow her to remain there until the plaster has become thoroughly set; it is then to be trimmed out under the arms and in front of the thighs, to allow of perfect flexion of the limbs; after which time the leathern collar which I here show you, is placed under the chin and occiput, then by the means of these two straps on either side, which pass up, one over the inferior maxilla, and the other from the occiput to this small cross-bar attached to the central rod of the jury mast (see Fig. 2), our support is secured for the head and by means of which the entire weight of the head is removed from the spinal column if the straps of the head-rest be properly adjusted. You must, however, at all times be certain to get your central point of traction or suspension by means of this cross-bar at the end of the jury mast, immediately above the vertex of the head; leaving room at all times for a cap or hat to be worn upon the head under the instrument. At no time must the jury mast press upon the head; the distance desirable between the cross-bar and the top of the head is from three to four inches.

In removing the child from the suspension after the jacket has been applied, you must be extremely cautious that you do not allow her to bend her back before the plaster has set, otherwise your labor will have been lost. Also while applying the jacket, see that you carefully mould the jacket in above the crest of the ilia, so as to secure a shoulder for your jacket, but do not mould it in so severely as to cause pressure or excoriations.

Case 2. This little fellow, four years of age, whom I here present to you, illustrates an extremely interesting feature in the application of the plastic jacket in its worst possible manner. You are probably wondering, as the child now stands leaning over the chair for support, what man, calling himself a physician, could be bar-

barous enough to put such a thing upon this poor child; and independently of that, to expect satisfactory results from such treatment. Such an application can result in nothing but disaster to the child, as shown in the suffering depicted upon his face: and yet this man who applied this so-called plaster jacket, I am told by the father of the child now before you, stated that he had studied under me in my office.

I will now remove this casing, such as it is, and ask you if any one of you, after seeing me apply the jacket as in our previous case, could possibly imagine that such a man had ever seen a plaster jacket in his life. You notice that I cut easily through a few soft, wrinkled bandages, having a little plaster in them, but affording no more support than the ordinary roller bandage. Cutting through this, we now come down to a layer of cotton next to the skin, and around which the plaster bandages have been passed. There is no knitted shirt, or shirt of any kind; nothing but this layer of cotton and these few bandages, which you see I can roll or twist up in any form.

Is it then any wonder that at times the *Sayre plaster of Paris jacket* should fall into disrepute: when a man, calling himself a physician and living in the city of New York, should dare to put on such a misrepresentation, and claim to have been three years in my office, and putting on plaster of Paris jackets under my guidance? I have looked the directory through for this man, but I cannot find his name. It is now some months, the father states, since this was placed upon the child.

You will notice that the boy cannot stand but for a moment, and even then must support himself by placing his hands upon his knees. He at present is in no condition to be suspended for the application of the jacket, being in a greatly exhausted condition. I shall therefore direct that he be kept in bed until our next clinic, with perfect rest and good nourishing diet; when he will in all probability be in such a condition that the jacket and jury mast can be properly applied.

You will notice that as I lay the child across my knees, as in the previous case, and extend the spinal column, instantly there is an expression of relief, and he breathes more easily, and also tells us that "it feels better."

NOTE.—Jacket and jury mast applied one week later; after the jacket had become set, the child walked around with comfort and ease, and said he was "all right now."

MEDICAL SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Enormous Hypertrophy of the Heart (Weighing Forty-eight Ounces.)

PRESENTED BY CHARLES W. DULLES, M. D.

Thursday evening, December 13, 1883, Dr. J. H. Musser in the chair.

The patient from whom this specimen was obtained was a young man, eighteen years of age, who came under my care in February, 1882, in an attack of muscular rheumatism, principally affect-

ing the shoulders. I found at that time great oppression of breathing, a heart dilated and hypertrophied, with a harsh, strong, mitral systolic, and presystolic murmur. His urine contained bile, coloring matter, great excess of urates, great lack of chlorides and phosphates, and no albumen, or sugar. In the sediments only amorphous urates were found. The treatment employed included the administration of infusion of digitalis, with iron and strychnia. At one time, believing it might benefit the violence I attributed to the real hypertrophy, I gave him *veratrum viride*. But it did no good. I did, however, get apparently good and prompt relief from some of the symptoms by the use of iodide of potash, in twenty-grain doses, thrice daily. After using this for a week, I noted in my case-book: "Sleeps well; eats well; feels well; cough very slight; urine clear; pulse better; *cannot hear the old murmur!* (perhaps barely); both heart-sounds audible and pretty clear; action of heart fair." (It had been very tumultuous.) After six weeks of doing well, the patient had a new attack of uneasy stomach, dyspnoea, and more or less cyanosis. On the night of May 10 he had a frightful attack of dyspnoea. I gave him gr. $\frac{1}{2}$ of muriate of pilocarpine hypodermically (in the left arm), under the influence of which he sweated, but had no salivation.

The next day he had a large oedematous swelling of the left side of his neck, below the jaw, and reaching to the middle line in front. This increased up to the evening, and gradually subsided in three days.

About this time fluid began to accumulate in the abdomen and thorax, and there was, of course, oedema of the feet and legs. There was also heard now a most beautiful water-hammer pulse over the femoral arteries below Poupart's ligament. The pulse here was intermittent and had a reduplicated sound like this, . —, . —, . —, . —, etc.

Three weeks later another severe attack occurred, and again about three weeks after this. There were now in his urine considerable albumen and hyaline tube casts. When his attack came on, which was at night, I gave him gr. $\frac{1}{4}$ of the muriate of pilocarpine hypodermically, which produced free sweating, and brought out about f $\frac{3}{4}$ ij of saliva. His pulse came down from 140 to 100 in half an hour. But the dyspnoea abated only temporarily; the restlessness continued; the cyanosis increased; the respirations varied from 35 to 60 per minute; then his bowels moved involuntarily, his lungs seemed to fill up with oedema, and he died asphyxiated.

The autopsy was made the next day, with the assistance of Dr. Formad and Dr. J. H. Musser. The points of interest were as follows: General oedema of feet and legs; the face and neck and chest covered with purpura-like spots and patches. The abdomen contained about two quarts of clear serum; each pleural cavity nearly as much. The lungs were normal, but small, and occupied the upper part of the chest. They were quite oedematous. The liver was slightly fatty, the spleen was of normal size, but very hard and tough. The kidneys were large, congenitally lobulated, and in a state of cyanotic hypertrophy.

The heart was enormously hypertrophied, weighing, when all the adherent parts were re-

moved, 48 ounces. The pericardium was so uniformly attached to it that it could not be removed, and there was absolutely no pericardial cavity. The right ventricle contained about six ounces of soft post-mortem clot. The left side contained about two ounces similar. After the heart had been opened and cold-washed, it weighed 40 ounces. All the valves and blood vessels were healthy. The tricuspid and aortic valves were quite competent. The mitral orifice was enormous, measuring $2\frac{1}{2}$ inches across. Every part of the heart was hypertrophied, and all to about the same degree. The whole organ, which I here show, was about the size of that of a bullock.

The points of interest in this case, aside from the curiousness of the specimen, seem to me to be: the comparative immunity of the kidneys; the absence of signs of adherent pericardium; the benefit derived from the use of iodide of potash; the temporary disappearance of the very strong mitral systolic and presystolic murmur; and the parotid swelling following the hypodermic injection of pilocarpine in the arm of the same side.

Dr. J. H. Musser remembered distinctly the case both before and after death. He had marked out on the chest the dimensions of the heart, and made it out as enormous, extending especially to the right. Furthermore, he thought that there was a double mitral murmur. The only apparent cause for the hypertrophy was the adherent pericardium. He would like to know what Dr. Henry thought of the correctness of this explanation.

Dr. F. P. Henry said that the heart presented was remarkable not only for its enormous size, but also for the absence of the usual causes of cardiac hypertrophy, there being neither valvular disease nor obstruction in any part of the circulation. During his student days he had seen some very large hearts in the collection which Prof. Alonzo Clark was accustomed to show to his class, but would not trust his memory so far as to affirm that any one of them was as large as the one just shown.

Dr. MacConnell had seen a case in a member of the Modjeska troupe, where post mortem examination showed an enormously hypertrophied heart with adherent pericardium, and markedly granular kidneys. In this case the hypertrophy was clearly due to the kidney trouble.

Dr. Formad thought that Dr. Dulles's case was unique as to size. Dr. Robinson, of New York, had recently reported a case of hypertrophied heart weighing 56 ounces, but Dr. Dulles's specimen was weighed after removal of clots, etc. Dr. Musser asked whether other members of his patient's family had not hypertrophied hearts without valvular lesions. If such was the case, taking into consideration the age of the patient, it would be well to consider the probability of the hypertrophy being in part secondary to the pericardial adhesions, in part idiopathic in origin. Dr. Dulles said that there was a tendency to hypertrophy of the heart in one sister, and that the murmur at times was double.

Calcified Pericardium—Double Mitral Disease.

Ella S., white, at. twenty-three, was admitted to the University Hospital, September, 1880, complaining of palpitation and dyspnoea, and suffer-

ing from an oedematous and eczematous condition of the lower extremities. She was a girl of regular habits, somewhat exposed to changes of weather and to wet, doing no very hard work. She had had the diseases peculiar to childhood, but never rheumatism nor chorea. Her father had had acute articular rheumatism, and died suddenly; beyond this, there was nothing peculiar in the family history. Three years before admission she first noticed slight palpitation and dyspnoea on exertion. For some time before that she had been subject to frequent attacks of epistaxis. One year afterward dropsy appeared in the ankles and spread upward. The palpitation and dyspnoea became more troublesome, her flesh and strength failed, and she was compelled to quit work and come into the hospital. When first seen she was pale, anæmic, weak, breathless on exertion. The heart's apex beat was in the seventh interspace, one inch outside of the nipple line; action strong and heaving. Best heard over the apex beat, but transmitted feebly up toward the base of the heart, and well out into the axilla, was a loud blowing systolic murmur. There was no pain in the heart, nor tenderness on pressure over it, nor had there ever been. Over the lungs were scattered moist râles; the respiratory murmur was harsher on the left than on the right. Cough was slight, with some mucous expectoration. The lower extremities were oedematous, and the abdominal cavity about half filled with fluid. The liver was slightly enlarged. The urine was normal in quantity, and contained neither albumen nor casts. Under treatment the urine became copious, the oedema gradually disappeared, and the heart action became stronger and more regular. In a few days friction-sounds appeared at the base of the right lung. Any slight exposure would bring on an attack of intense congestion of the lungs, with dyspnoea, that often threatened life; and with these attacks there was often congestion of the kidneys with suppression of the urine. Between the attacks, the heart retained its power well, though it slowly dilated. At intervals she complained of dull pain in the hepatic region. The rough respiration noted at first over the left lung became more and more marked, till finally, over a small area just below the spine of the scapula, it had developed into bronchial breathing. Friction-sounds came and went. There were always moist râles scattered through the lungs. The expectoration was mucous, or rarely muco-purulent. Three months after she came under observation there was developed at the second right intercostal space, and carried out into the arteries of the neck, a systolic murmur differing in pitch and tone from the mitral systolic. About this time, too, she complained of pain in the heart whenever its action was excited. Soon afterward albumen was found in the urine, but no casts. This was the only time it was ever detected. Fourteen months after she was first seen there was noticed, just inside the apex beat, and carried indistinctly toward the base, a harsh, short murmur, immediately preceding the systolic murmur and separated from it by an exceedingly short, but appreciable interval. This murmur was noted on several occasions afterward, but was much more frequently absent than present. Its appearance and disappearance seemed to be at-

tendant on no definite conditions. Soon after it was first noticed she had several attacks of epistaxis, and afterward occasional slight hemorrhages from the lungs. She was discharged in March, 1882, and was readmitted last September. She had been gradually losing ground. Seven months before she took cold, the dropsy returned and persisted. When seen, the whole body was oedematous, and the abdomen enormously distended. The apex-beat was in the fifth interspace, in the mid-axillary line. The systolic murmurs were, perhaps, louder, but beyond this had not changed. Over an area between the left nipple and the sternum was heard a harsh, low-pitched presystolic murmur. It was much more apparent than the former presystolic murmur, but had the same characters. Its point of maximum intensity was just to the left of the sternum. It was constant. The respiratory murmur over the left lung was very much harsher than over the right. Below the spine of the scapula the breathing was sometimes blowing with mucous râles, sometimes cavernous with gurgling râles. The expectoration was mainly frothy mucus. She died three weeks after admission, in a fit of dyspnoea.

Autopsy seven hours after death. General dropsy, most marked in the lower extremities and genitals. On the lower part of the abdomen there is a marked varicose condition of the cutaneous lymphatics. Cavity of the pericardium is completely obliterated by adhesions. The two pericardial surfaces, and the fibrous tissue connecting them, had been changed into a calcareous plate three inches broad, completely encircling about its middle the heart, with the exception of a space one inch wide on the posterior surface of the left ventricle. This calcified condition extended for one inch on the anterior surface of the pulmonary artery. The heart, with the calcified pericardium, weighed twenty-eight ounces. The auricles were dilated, their walls thinned. The ventricles were dilated, their walls thickened and undergoing fatty degeneration. The leaflets of the mitral valve were thickened and rigid; the mitral orifice was very decidedly narrowed. In the inner surface of the left auricle were several calcareous patches. The aorta was very small, scarcely admitting the index finger, and showed patches of atheroma. The lungs were chronically congested and oedematous, the condition being most marked on the left; there was no breaking down of their substance. The abdomen contained five gallons of straw-colored serum. The peritoneum was thickened and roughened. The liver weighed three and one-half pounds, and was cirrhotic. Its capsule was much thickened and adherent to surrounding structure. The mucous membrane of the stomach was thickened. The kidneys showed cyanotic induration.

Section of Fibroma Mammæ.

Presented by Dr. MacConnell for Prof. Pancoast.

The patient was 22 years of age, and the growth was of seven months' duration. Fibromata of the breast are very frequently found, although some English authorities consider them to be of rare occurrence. They have been variously described, under different names, by writers. Birkett considers them a form of adenoma; Broca, adenoma with predominance of stroma, etc., etc. This

tumor was of an ovoid shape, firm and elastic, and on section presented a maroon-colored tissue, which under the microscope is seen to be composed of dense bundles of mature fibrous tissue, with but few nuclei. In some portions, bands of wavy connective tissue are seen. The epithelial elements of the acini are hyperplastic.

Section of Large Spindle-celled Sarcoma of Lower Jaw.

Exhibited by Dr. MacConnell for Prof. Pancoast. The patient was a man, æt. 24 years. The growth had existed for about three years. The egg-shell crackle was readily elicited, the growth being of a central origin. On section it presented a whitish appearance, and was permeated by spicula of bone.

Liver of Chicken with Tubercular Growths.

Exhibited by Dr. MacConnell.

The microscope clearly proved the nature of the growths.

Dr. Formad had seen four or five similar cases in the chicken, and two in the turkey, in all of which he had detected tubercle bacilli.

Dr. Barton was much interested in two of the specimens presented by Dr. MacConnell. He was much surprised as to the nature of the tumor of the jaw, in that it was a spindle-celled and not a giant-celled sarcoma. Its site and duration would clinically have clearly indicated one of the myeloid variety. The sections of the mammary growth differed from those examined by him, in that in adeno-fibroma the glandular elements were more evenly distributed, whereas this section reminded him of his former studies of an elderly normal gland; such large tracts are found without any traces of gland tissue, whereas, in all adeno-fibromas examined by him the adenomatous and fibrous elements were relatively more evenly distributed, giving the idea of the neogenesis of both, and not the atrophy of one and the proliferation of the other.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, Thursday, January 3, 1884, the President, R. A. Cleemann, M. D., in the chair.

Batley's Operation.

Dr. E. E. Montgomery corrected a statement made in the report of the case of ovariectomy narrated by him at the meeting of December 6, 1883, (see REPORTER, January 5, 1884, p. 14). *Silk ligatures*, not catgut, were used to tie the pedicles.

The convalescence of the patient had been very satisfactory. The temperature did not rise above 99° F. In performing this operation no antiseptic was used, all instruments, sponges, etc., were washed in boiling water, and boiled water was used in washing the wound and abdominal cavity. The mental condition of the patient was such that she was kept constantly under mechanical restraint, and on one occasion, when she had been left alone for a few minutes, she tore all the dressings off of the wound, and at the next visit it was found bare, but no bad result followed. The sutures were removed on the eighth day. Some pain in the lower part of the abdomen and slight fever commenced on the twenty-fifth day, but she

has since again improved. Her mental condition is at the present better than it had been for a year before the operation, and she can now converse rationally.

Septicæmia after Abortion.

Dr. W. H. Parish reported the following case: A young woman, twenty years of age, came into the Philadelphia hospital in the finishing stages of an abortion which had been coming on for some days. The cause was unknown, but was probably instrumental. At the time I first saw her, three days after admission, her temperature was 103° to 104° F., and pulse 150. She had had a chill before admission, her abdomen was distended and tender, and the uterus was very sensitive. The right parotid gland was swelled and painful. It continued to enlarge, and fearing septicæmia, he gave fifty grains of quinine daily by rectum, as the stomach was too irritable to retain it; one ounce of whisky was given by the mouth every hour, day and night. A small quantity of morphia was given to relieve the abdominal tenderness. The pulse and temperature fell rapidly, but the gland continued to be swelled and painful; it was quite hard, but was discolored. There were no chills now, but fearing the presence of pus, he made an opening by Hilton's method, incising the skin and using a director to tear an opening through the gland tissue; this opening was enlarged by passing a pair of forceps, closed, along the groove of the director, and withdrawing them opened. This opening gave exit to two or three fluid-drachms of pus. The gland now improved in appearance, but another abscess opened behind the gland and discharged freely. The two abscesses did not communicate. The patient is now convalescent.

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PHILADELPHIA COUNTY MEDICAL SOCIETY.

Discussion on Nervous Prostration. (See page 97.)

Dr. Mills, in opening the discussion, by request of the Chair, said: "I understand that Dr. Bartholow denies that a disease exists, primarily nervous in origin, which can be called neurasthenia. He classes all cases so-called under two heads, congestive and anæmic, and holds that the symptoms presented are chiefly reflex effects of digestive or other visceral troubles. I have no doubt that many cases are to be thus explained, but we have others in which the cerebral condition is primary. In cases with the symptoms as detailed in the paper, we may perhaps clearly ascribe

them to the causes and conditions referred to by Dr. Bartholow, but other cases may be explained in a different manner.

"In individuals whose higher ganglionic centres are so constituted, from bad inheritance or poor training, or both, that they cannot bear much strain, when subjected to this strain, these centres exhaust. We have certain functions called organic functions, respiration, vaso-motor action, etc., with centres in medulla oblongata and spinal cord. These functions must be maintained as long as the individual exists. Their centres must be nourished and sustained in a uniform way. Presiding over automatic movements, they must be kept in the highest tone, must have good blood and plenty of it. It is a principle brought out in the paper that local diversion of blood to any one organ or part will take it from other organs or parts; and we may, in accordance with this, have the higher brain diverting blood from the lower, or lower brain from the higher. We have *nervous* symptoms, the result of this overstrain of nerve-centres, and the disturbance of the equilibrium of the circulation thereby brought about.

"I am inclined to differ from Dr. Bartholow, and agree with Dr. Beard, as to the propriety of the term 'American Disease.' The social and business exigencies in this country are different, are more taxing than in Europe. In England, for instance, men become mature and enter public life at later periods than here. In France the difference is not so great, but the more absolute division of society into grades and castes prevents too fierce a struggle for high position. Here every man has the chance to rise to the highest position, and men enter especially political life in youth. Americans are not trained for special lines of life-work. They often attempt work too high for their mental powers, and break down."

Dr. Tyson: "I have many times asked myself the question, 'What is nervous prostration?' The answer was always, 'It is not a nervous disease, certainly not an organic nervous disease, and probably not a functional one. It is rather a condition of muscular fatigue, and it may be nervous fatigue. Most of the cases are accompanied by digestive derangements, which are responsible for many of the symptoms, most of which are reflex.' At the same time, I admit that some of the symptoms are puzzling, and not easily explained. Among these is the pain in the back of the head, often referred to as the result of 'nerve tire,' and sometimes regarded as an important indication of cerebral disorder, which it is not. In women, uterine derangement is often responsible for the complex symptoms known as nervous prostration.

"The point, however, that attracted me in the paper read, was allusion to the condition of the urine in one of the cases. It was described as dark brown, of high specific gravity, containing a trace of sugar. I have seen such cases, and think it not unlikely that the apparent sugar reaction is really due to uric acid, which is often abundantly present in these urines of deranged digestion. If we get rid of the excess of uric acid, by allowing it to precipitate spontaneously, or precipitate it by the addition of an acid, the sugar reaction with the copper tests does not take place. Other characters of the urine, particularly its

dark color and scantiness, are not usual to sugar-containing urine."

Dr. Eskridge: "The most important point in the subject is whether the condition called neurasthenia is primarily a nervous disorder, or a disturbance in other parts of the body. I would have been better pleased, if Dr. Mills had elaborated more thoroughly his statements as to the organic functions. He said these functions must be well nourished, and that failure in them is due to failure in the upper nervous system. I would have liked if he had gone further in his explanation. Is this failure due to disturbance in the brain and upper portion of spinal cord primarily, or to failure in other parts of the body? Those who have paid attention to this subject say that breakdown does not occur unconnected with either worry or vice. I have never seen a case from mental over-work alone. In five cases of neurasthenia, of which I have notes, one was from sexual excess; two from worry connected with family troubles; another from alcoholic excess, with sexual vices; and the fifth from sunstroke, followed by over-sexual indulgences. In the last case it seemed as if the brain was primarily at fault. It appears to me that nervous prostration, so-called, is a depressed condition of the whole system; the trouble manifesting itself as a general nervous condition secondarily, after organs other than the brain have been primarily affected. The therapeutics also favor this view, because the cases are benefited, not by agents addressed to the nervous system alone, but by hygienic and tonic measures."

Dr. Glasgow: "I have come to regard these cases as not nervous in origin, but as largely due to digestive troubles. They are cured by attention to the disordered functions. I have known a short residence in Atlantic City, without any medical treatment, to suffice for a cure."

Dr. Bartholow, in closing the discussion, said: "The great question is, Is neurasthenia functional, or does it arise from organic change in the nervous system? I maintain that it is largely reflex, and frequently from gastric disturbance. Neurasthenia in women is associated with an anæmic condition and ovarian and uterine disorders. They are pale and weak, and if they are subjected to any moral or mental trouble, give way, but if they are well nourished sustain any kind of shocks without suffering in health.

"In regard to the term 'American Disease,' and to the claim that the peculiar conditions of American life are causative of neurasthenia, it will suffice to say that in some of the European states a higher grade of education is maintained than in this country. In Prussia, for instance, every one is taught to read; education is more general than in Massachusetts. The struggle to maintain existence, and hence the demands on the brain, are severer than here; and although neurasthenia is said to be uncommon, there are diseases similar to that called nervous exhaustion in this country, arising from similar causes.

"Worry has been mentioned as a cause of nervous exhaustion: now, worry hurts a man just in proportion to his condition. If he is in good health, or phlegmatic in temperament, the worry may be well borne; but if he is out of health, worry will have a powerful effect on the nervous

system. I do not deny that various causes may produce brain disease, but I deny that the so-called neurasthenia is due to an organic lesion of the nervous system. I maintain that it is a part of

a morbid complexus; a reflex condition, in large part, of maladies situated in the stomach, the liver, the uterus, or other organs."

EDITORIAL DEPARTMENT.

PERISCOPE.

Colds.

We take the following from the *Lancet*, November 14, 1883:

Colds are chills, and chills are prolonged depressions of nerve-force, without the reaction which should occur immediately after the collapse. Nineteen persons out of twenty misuse this word "reaction," and the misuse involves more than an error, or confusion, of terms. There are three stages of every strong impression made on a living organism. First, the attack—in this case the chill; second, the pause, like a dead-point, during which the organism is depressed—that is, lying under the stunning effect of the attack; and third, the reaction. The "reaction" cannot occur until after the dead-point, and the mistake commonly made is to speak of the stage of exhaustion or depression which follows any severe impression as the reaction, whereas it is precisely because no reaction occurs and the dead-point is prolonged that matters go amiss. The physiological, or perhaps we ought to say the pathological, process of a cold has been thus described: When the surface of the body or the air-passages are chilled by a draught, or by being drenched with rain and sitting in cold, damp clothes, lying in damp sheets, and the like, the mischievous impression is made, not on the skin itself or on the lining membrane of the air-passages, but upon the vast network of minute nerve-filaments which lies beneath these membranes, and connects the surfaces of the body—both external and internal—with the nerve-centres, which are the sources and foci of energy and power. These nerve-centres receive, through the multitudinous branches of telegraph-like afferent nerves converging to them, a shock or staggering impression which for the moment paralyzes them; and during this paralysis or stupefaction the vaso-motor, or vessel-contracting centre, whose peculiar function it is to regulate the calibre of the blood-vessels, gets the upper hand, and these blood-vessels are contracted so that they carry less blood than usual. The smaller branches of the arterial system, which form a net-work immediately underneath the skin and give it its bright pink color, are so reduced in "bore" or calibre—as any elastic or compressible tube may be reduced—that the red blood does not flow through them, and the surface looks pallid. This is the first effect of "chill." Presently comes the recovery from this state, or the "reaction" as it is called, when the first effects of the shock have passed away and the centres begin to revive. Now occurs the critical moment. If the shock

has been great, and the recovery is slow or imperfect, as often happens in a depressed or what is called a "delicate" state of the organism, the vaso-motor centre, which, of course, shares the general depression, though it is not the first to feel it and show it, will give way before the reaction is established; and then the heart, bounding in its recovery, pumps its blood into unduly-yielding and unstrung vessels, and dilates them, and local congestions or accumulations of blood may take place, while the absence of proper resistance excites the heart to tumultuous action, and the disturbances of fever and inflammation occur. It is a question of the balance in power between two parts of the nervous system, the general and the particular—the latter being the centre that regulates the calibre of the blood-vessels—and this practically resolves itself into a question of time. If the reaction of the general nervous system be quick, there is a rush of blood to the surface vessels, and due resistance being found, the heart quickens its pump-like action, and the sweat-glands are thrown into activity, so that perspiration ensues. If, on the other hand, the vaso-motor centre has participated seriously in the shock of the chill, the muscular coats of the vessels are not properly contracted; they have lost their tone. Then the blood propelled to the surface simply dilates the vessels, so that there are the redness and heat of "fever" or pyrexia, and the skin remains dry; there is rapid action of the heart, partly because there is less than the normal resistance to overcome, and partly because the vagus fails to exert its inhibitory action, and both the muscular structure of the heart and the respiratory centre are left uncontrolled, but the current of the blood moves slowly through the vessels, and the heart-wave is perceptible in the arterioles, and is present in the capillary area.

Coincident with these mechanical actions and reactions, involving departure from the healthy condition of the circulation, occur disturbances of the chemical processes of health, and consequently alterations in the nutritive relation of the various tissues of the organism and the blood. What then is a cold? Clearly it is a disturbance of the balance between the several parts of the nervous system, brought about by the shock of a sudden or prolonged exposure to the depressing effect of "chill"; although the same physiological results may be produced in the organism by the operation of any agent which is capable of giving the nervous system a similar shock, and thus creating the same kind of disturbance. Nature's provisions against the consequence of a "chill" and for the prevention of a "cold" are *sneezing and shivering*. A violent fit of sneezing often saves a chilled

body the consequences of the nerve depression, or "shock," to which it has been subjected; and this shock may in its first impression be very limited in its area; for example, the small extent covered by a draught of cold air rushing through the crevice of a door or window. The nerve centres are aroused from their "collapse" by the commotion or explosive influence of the sneeze. If sneezing fails, nature will try a shiver, which acts mechanically in the same way. If this fails, the effects are likely to be very serious, and bad consequences may ensue. The popular notion reverses the order of events, and hence the saying, "If there is sneezing the cold will be slight, if there is shivering it will be grave;" whereas it is slight when sneezing suffices to recover the nervous system quickly from its depression, and grave when even strong shivering fails to do so. In case of chill, with threatened cold, sneezing may be produced by a pinch of snuff of any kind. This is how some of the vaunted "cures" of cold by snuff are brought about. Or brisk exercise may ward off the attack. The popular idea is that the circulation is restored by these remedies, but the true explanation is that the nervous system and centres are aroused. The first step towards an intelligent treatment of chill and cold is a scientific recognition of their nature.

Nervous Derangements of the Heart.

Before the Medical Society of London (*Lancet*, November 24, 1883), Dr. Milner Fothergill read a paper on some "Nervous Derangements of the Heart." He said that the organic diseases of the heart usually force themselves upon the notice of the patient by some indirect symptom—as shortness of breath on exertion—rather than directly. With the neural affections, on the contrary, the attention is drawn to the heart directly and immediately. This constitutes a broad main line of demarcation betwixt disease and disorder of the heart. The first form of disorder was intermittency, a halt in the rhythmic stroke of the heart. As such, it is a mere "neural halt," though it is not uncommonly found in elderly men who may at the same time be the subjects of degenerative changes. In these cases, when the halt is increased by an effort, it has a suggestive value; even then the halt is usually less felt by the patient than is the true neural halt without any disease. Sometimes the halt is found in the radial pulse, when the heart's stroke can be heard; this tells of an arterial blood-wave too feeble to reach the radial artery. Then palpitation not linked with effort, but coming on at other times when quiet is being observed, or even waking the patient up from sleep, is neural in character, though having varied causal relationships. Not rarely it is due to some disturbance in the reproductive organs, especially in women. Pain in the side often coexists with attacks of palpitation, and then the sufferer is sure her heart is "affected." Such "reflex palpitation" is commonly met with. Then there is the "tumultuous" or "badly behaved" heart, whose action is never calm, often a simple nuisance to its owner. There is, too, disturbed action of the heart from indigestion. Then the heart's beat may be slowed by the action of the "inhibitory" fibres of the vagus

nerves, or hastened by some action of the "accelerator" fibres. In the latter case the heart may run off suddenly at the rate of 200 per minute for some hours, ceasing as rapidly as it began. The opposite condition is also present at intervals in some cases, though more persistent in others. Great disturbances of the heart's action, which is often markedly enfeebled, are found with latent gout, usually relieved by an attack of regular gout. Then there is the "irritable heart," where, though the condition is truly neural, there is distinct inability to maintain effort. This is the result of much hard work and mental strain combined, and is commonly seen in medical men. There are also the "smoker's" heart and "tea-drinker's" heart, well recognized disorders; truly "toxic" derangements of the heart. Angina pectoris (vaso-motoria) may occur with a heart still structurally sound, or in one where fatty decay is established. In the first, it is of comparatively little importance; in the latter it is fraught with danger to life. The treatment of neural complaints is as different as their nature.

Sir Joseph Fayrer thanked the author of the paper for the lucid exposition he had given of the various neural diseases of the heart. He could confirm much that had been said, and especially the fact that such states were often relieved by treatment which would have done harm to sufferers from organic cardiac mischief.

Dr. Sanson testified to the great prevalence of these maladies. He thought there was some other factor than mere dyspepsia in certain cases of cardiac intermittency. Cases illustrating his remarks were quoted, showing how even single errors of diet in things not usually considered indigestible might produce the disturbance, which was as readily relieved as originated. An instance of fright leading to apparently acute dilatation of the heart was narrated as affording ground for the belief that organic disease might be consequent on a primary neural affection.

Dr. Wynn Williams asked whether uric acid circulating in the blood could produce intermittent action of the heart.

Dr. Isambard Owen thought that those cases where the pulse failed at times to reach the wrist were of very grave significance. He had seen instances of very frequent pulse unassociated with other signs and lasting for months.

Dr. Braxton Hicks gave some facts observed in his own person. Rapidity of pulse and even intermission seemed to be distinctly related to overwork or some mistake in diet of the nature of an idiosyncrasy.

Dr. Fothergill replied in the affirmative to Dr. Williams, and agreed with the remarks of Dr. Owen. If Dr. Sanson had seen mural disease of the heart arise from neural affection, he (Dr. Fothergill) had witnessed the production of valvular changes; and so there seemed but little doubt that these slight affections might lead to more grave diseases. A larger number of observations in every direction was what was wanted.

Large Fibroid Enchondroma of Palate; Excision; Recovery.

Dr. William Stokes reports this case in the *Dublin Jour. Med. Sci.*, November, 1883:

A boy, aged eight, was admitted into hospital, under my care, on February 10, 1879. The child's parents informed me that he had never complained of anything in connection with his throat until about six weeks previously to his admission into hospital, when they observed a sudden change in the quality of the boy's voice. On opening his mouth they perceived a large prominence occupying the greater portion of his palate. The boy was well-nourished and healthy-looking, and had never suffered from anything except the usual infantile diseases. There was no history in his family of scrofula or of cancer. On examining the tumor, I found that it occupied mainly the left side of the palate, and that although it appeared to cross the mesial line, it did not really do so, but merely overlapped it. It was very vascular, and numerous vessels were observed ramifying over its surface. The boy suffered nothing from difficulty of deglutition, nor from any impediment to respiration through the nostril on that side. On passing a Eustachian catheter, no obstruction was found in the pharynx. There was no fluctuation, but the tumor was decidedly elastic, and some portions were considerably denser and harder than others. At certain points I felt distinct, apparently cartilaginous, nodules. There was apparently no adhesion of the mucous membrane to the tumor, as it moved freely over it. On the front of the tumor was a depression occupied by a superficial ulceration; from this there was no hemorrhage at any time.

A point of practical importance in the case was to determine the origin of the tumor—whether, namely, it grew from the base of the skull, from the roof of the nasal fossa, from the hard, or in the soft palate—the nature of the operative procedure having to be determined, to a great extent, with reference to the situation of the tumor, and therefore it was all-important to determine what its origin was. I determined, if possible, to remove the tumor without making any external wound. Accordingly, after opening the mouth as wide as possible by T. Smith's gag, I made a free incision over the anterior aspect of the tumor, and proceeded to dissect the mucous membrane off the tumor. This being done, and no adhesions being found, I was enabled to pass my finger round it, and eventually succeeded in enucleating and removing it. I found that it had no attachments to any of the neighboring osseous structures. The absence of any difficulty in passing an instrument down through the nasal fossa was chiefly the reason that made me come to the conclusion that the tumor had not its origin from the base of the cranium; but I did think that it was possibly attached to the palate or superior maxillary bones, in which case I should have had to split the hard palate, and arrive at the tumor in that way. I found, however, that it was essentially in the soft tissues of the palate itself, and, in fact, lodged in its substance.

On making a section of the tumor after its removal, I found its substance to be very firm, consistent, and elastic, and rather more dense towards the centre than the circumference. For a short time after the operation there was very sharp hemorrhage, but this was checked by pressure and cold, no vessel having to be ligatured. The wound rapidly united. In examining the

tumor I had the assistance of the late Dr. R. Harvey. The tumor was composed of fibrous tissue over a cartilaginous matrix. The greater portion of it might be described as a fibroid enchondroma. It had also, Dr. Harvey stated, "masses of round cells, evidently of recent growth, and of a more or less sarcomatous nature."

There has been no evidence of any recurrence of the tumor.

Epithelioma of Cervix Uteri—Recovery without Operation.

The *Medical Press*, September 12, 1883, says: Cases of the above have been recorded from time to time, and upon perusing the reports of such cases carefully, one can scarcely arrive at any other conclusion than that if actual recovery does not take place, such a degree of improvement does that we can scarcely blame the fortunate attendant for designating the result as recovery.

It has long been observed that under certain circumstances, such as high general pyrexia, as in the case under notice, erysipelatous inflammation around the affected part, other inflammations, such as that produced by the injection of irritants in the vicinity of the diseased portion (Duploux), or like that produced by the actual cautery in the affected mass (Gallard), or around it (Nussbaum), a normal cell growth may, and occasionally does, take the place of the abnormal growth characteristic of cancer.

Such a case has been recently reported in the *Deutsche Med. Zeitung* by Dr. Staffhorst, of Otten-dorf, Hanover. There appears to be no reason to doubt the accuracy of the diagnosis. The case was under observation several months; it resisted every method of treatment, the patient going almost steadily from bad to worse; and it was not till an unexplained attack of pyrexia, preceded by violent rigors, occurred, that any improvement took place. It might be supposed that the pyrexia was due to an attack of pelvic cellulitis, or peritonitis, and that this in some way modified the cell development of the diseased portion; but the report appears to negative this supposition. No mention is made of pelvic inflammation, and it is scarcely likely that such a complication should have remained undiscovered, or that no mention should have been made of it had any been noticed. Whatever the cause may have been, the progress of the disease seems to have been arrested immediately after the occurrence of the pyrexia: the hæmorrhages and offensive discharges ceased, and in the course of a few weeks the ulcerated surfaces were covered by cicatricial tissue. Some shortening of the vagina had taken place, posteriorly the cervix had become attached to the vagina, and some tenderness remained in the hypogastrium, especially after long standing. The patient's appetite was good, and she had increased in weight and strength, so that up to the date of the report, four months after cicatrization, the improvement promised to be permanent. Upon the whole, we may conclude from the report of this case, taken in conjunction with expressions by other recent writers, that the prognosis in any particular case is not absolutely unfavorable, and it remains for us to follow up the faint glimmerings of hope that are here and there vouchsafed us.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

A Treatise on Pharmacy. By Edward Parrish. Fifth edition, enlarged and thoroughly revised by Thos. S. Wiegand, with 256 illustrations. Philadelphia, H. C. Lea's Son & Co., 1884. 1 vol., leather, 8vo., pp. 1088.

The art and business of the pharmacist have materially changed since the first edition of the above standard work was issued, and the enlargement of its size and extensive additions to its contents are a fair index in the rapid growth of the pharmacist's profession. We say "profession" because, when one surveys the extended, varied, and minute scientific knowledge essential to the full appreciation of this book, it is evident enough that the student of pharmacy has to pursue a course of study quite as recondite, quite as elevated, quite as remote from "business," as has the student of medicine, of law, or any of those vocations hitherto distinguished as "professions."

Thus, much the larger portion of this treatise, to wit., from page 170 to 640, is devoted to chemistry, inorganic and organic, in its relation to pharmacy, and can only be understood by one who has already mastered more than the elementary principles of that difficult science. Introductory to this portion is a chapter on pharmaceutical processes and apparatus, and following it are two parts, one on "Galenical Pharmacy," the other on "Extemporaneous Pharmacy." The last mentioned are what in an older generation would be considered about all that a druggist need know.

This new edition has been required, partly by the constant additions to pharmacy, and more especially by the late revision of the U. S. Pharmacopœia. The changes have been considerable, involving, among other things, the rearrangement of the entire chemical section in conformity with the present views of that science.

The paper, printing and binding of the book, and the character of the illustrations, leave nothing to be desired in those directions, and we can point to this volume as one eminently creditable to the author, the editor, and the pharmacy of America.

Conférences de Clinique Médicale faites à l'Hôtel Dieu. Par M. le Dr. F. Raymond, Paris. A de la Haye, 1883. 8vo., pp. 248.

Dr. Raymond presents his readers with a varied assortment of cases from his most recent hospital service. There are in all fourteen conferences, each

treating of a different class of cases. Beginning with sarcoma of the uterus and of the dura mater, he takes up in turn abscesses of the ear, meningitis, acute myelitis, chronic pneumonia, articular rheumatism, especially in its pulmonary and cardiac complications, muscular atrophies, cerebral syphilis, cirrhosis and icterus, aneurism of the aorta, latent cancer of the stomach, neurones, and nephritis.

His method is the strictly clinical one. Every conference takes for its text the actual patient. His present condition is studied, his past history is searched for, and on these factors are constructed the diagnosis, prognosis, and treatment. The general relations of the case are then explained, and the value of various therapeutical measures discussed.

We regard the volume as a good specimen of French clinical lectures.

La Longevité et les Moyens de l'Acquerir. Par Joseph G. Richardson, Professor d'Hygiène à l'Université de Pennsylvanie. Traduit par P. Barrué, Paris. Asselin et Cie, 1884.

The growing respect for American medicine abroad is illustrated in many ways, and in France notably by the publication of a "Collection Américaine" of a series of volumes translated from works of our own medical authors. That whose title is given above is by Dr. Richardson, of Philadelphia, and is a translation of his essay on "Longevity," which has already achieved considerable popularity in our own country. All the questions relating to this always interesting topic are discussed in a lucid and attractive style, and the public interest in sanitary topics is thus secured by holding out to them the coveted reward which they can probably gain by obedience to the precepts of health.

We have examined the translation in a number of passages with care, and have found it very well done. M. Barrué has a simple and effective style, and his knowledge of English is evidently thorough.

Such a recognition of the merits of a volume is not merely creditable to the author; the credit is reflected on the medical profession of our country generally, and such appreciation of our best medical literature abroad will be felt by all in a greater or less degree.

—To attain length of days maintain a mental equanimity which neither success nor reverses can disturb. Love nothing too passionately; hate nothing too violently; fear nothing too strongly.

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LITHÆMIA.

Whatever may be the cause of the condition commonly designated "Lithæmia,"—whether it be allied to gout and is really, as some maintain, a "suppressed gout"—matters but little to the practical physician, since we have the means at our command of relieving it. The etiology is of course interesting, and we trust that the labors of our clinicians and scientific workers will be crowned by an elucidation of this debatable question; but what the busy doctor more particularly requires are the points of diagnosis and treatment.

It is particularly essential that we should be prepared to recognize this affection, since it so often simulates serious organic disease; and yet, if understood and properly treated, very simple measures will produce exceedingly happy results.

Oftentimes a patient will come complaining of vague, ill-defined bad feelings, which make him apprehensive of kidney or heart disease, or of impending serious trouble. A careful examination fails to reveal any organic disease; for, says Dr. George H. Lyman, in the *Boston Med. and Surg. Jour.*, December 13, 1883:

"The disorder in question has no fixed set of symptoms. The subjective expression of the pathological condition may manifest itself in protean forms. Either the gastric, rheumatic, renal, hepatic, cerebral, or cardiac, or several of them combined, may seem to predominate in any particular case, yet each is dependent in great measure upon certain lithuric conditions, which being neglected, render any treatment unsatisfactory if not wholly useless. It is not necessary that nausea, constipation, or diarrhœa, headache, insomnia, or palpitations, myalgic pains, or urinary deposits, should all be present in any given case; the subject of it indeed is quite likely to express himself as being otherwise in good health and strength, vigorous in mind and body, and yet so tormented at times, and apparently without cause, with one or more of the functional nervous phenomena described, as to induce in him the fear of some fatal organic defect of heart or brain.

"Of the varied symptoms, none are more distressing than the two which are the more immediate subjects of this paper: a constant tinnitus aurium from which there is no escape during the waking hours, and indeed which often interferes with the sleep—buzzing, ringing, clicking, or

constant pulsation, for which no visible nor tangible cause can be discovered either in gastric disorder or the external and internal auditory apparatus—is not only a constant source of annoyance but of serious apprehension to its unfortunate possessor; or still more if either with or without this tinnitus the victim finds himself the subject of sudden attacks of vertigo, so severe and decided as to cause a staggering gait, possibly complete prostration, as an attack of epilepsy, the case assumes a gravity which startles and terrifies its subject into fear of impending death.

"Another will have renal complications dependent wholly upon some hepatic derangement of function, which sends him from one physician to another in the hope of relief to his fear of Bright's disease, diabetes, or cystic calculus, while still another may be complicated solely with tormenting muscular or arthritic pains. And so on, one might recall instances of one or more of these, with the addition of purely nervous complications, simulating to the fears of the patient almost every conceivable organic disease."

Dr. Lyman seems well satisfied that this condition is due to faulty assimilation, this in turn being produced by dietetic errors.

He relates a most interesting case of a physician, who, after indulging in certain articles of diet, would be invariably attacked with tinnitus and great mental confusion. By avoiding that which he learned by experience to be hurtful, he could remain absolutely free from these attacks. Herein lies the principle of treatment. No definite, dogmatic dietetic laws can be laid down, each case must be a law unto itself, but certain rules can be enunciated.

That the liver may rest from its overcharged labor, saccharine, nitrogenous and alcoholic ingesta must be diminished, both sedentary habits on the one hand, and excessive fatigue on the other, and over cerebral exertion from study or worry, avoided, they all tending to weaken the circulation, and so favor acid accumulation.

With regard to the use of tonics, mineral or vegetable, they are often worse than useless, especially in the early stage of average cases, in which, with a careful diet, mild saline laxatives perseveringly used are the best tonics. In anæmic or broken-down cases their use may be, of course, a necessity.

In most cases alkaline salts are indispensable, and citrate of lithia is as useful as any, and perhaps the most agreeable to the stomach, although occasionally it over-stimulates the kidney and must be suspended for a time, or replaced by soda or potash, taken an hour after meals, these being in all cases preferable when much flatulence is complained of. Salicylate of lithia might be tried.

Where the pain is myalgic, muriate of ammonia in full doses will often give prompt relief, though if this result does not follow within a day or two, its continuance is useless.

Dr. Lyman lays great stress on the use of aperient bitter waters, such as Hunyadi or Pullna.

The patient should always be made to understand that the relief which he may receive is to be permanent only so long as the conditions of the cure are complied with, and that any indulgence or excess will almost inevitably be followed by its penalty; and moreover, remembering that too frequent recurrences of merely functional disorder are likely to result eventually in actual organic changes no longer amenable to curative treatment.

During the discussion which followed the reading of this paper, Dr. Webber said that two symptoms had not been mentioned which are not so frequent, perhaps, as the others, but are yet of interest—irritability of temper, or a change of disposition; this may be only an accidental coincidence, depending in part upon the annoyance and discomfort caused by the other symptoms; perhaps, however, it may be due to the deficient nutrition of the brain. These patients are often much more disturbed at certain times in the day than at others, are excitable, and sometimes violent. Another symptom is temporary deafness, which may last only a few hours.

The diagnosis between lithæmia and other nervous affections is by no means always easy. Two conditions or diseases may be thought to be present, namely, tumor of the brain and epilepsy, when there is only lithæmia. A patient with headache, tinnitus, vertigo, change of disposition and languor, may be suspected of having a tumor; even a careful examination may not satisfactorily clear up the doubt, and it would be necessary to

wait for time to show the truth by the development of other symptoms, or by the recovery of the patient.

Therefore, when a doubtful and seemingly inexplicable case of departure from health, simulating organic disease, presents itself, it will be well to bear in mind this instructive article of Dr. Lyman's, and to remember that the therapeutic powers of diet have yet to be developed, that we know very little about them. One of the most interesting fields for the general practitioner to labor in, and one that is so rich in possibilities, because it is so little worked and so sure to make great returns, is the field of diet. What influence has it in causing disease, and what power has its regulation in restoring the functions to a healthy standard? That it has much more influence on the health of mankind even than is to-day accredited to it, we have no doubt; and with the growing tendency to rank preventive ahead of curative science, no subject can be more worthy of careful consideration, than the preventive and curative influence of diet.

WHAT IS LEGAL PROOF OF PROFESSIONAL SERVICES?

An important opinion touching the business interests of physicians was recently delivered in this city in the Orphans' Court, by Judge Ashman. The question arose on exceptions to an adjudication in the estate of Clarence J. Gorman. The physician to the decedent had rendered to the estate a bill for professional services, which had been contested on the ground that it was excessive—that there was no evidence that the visits had been rendered, and that the fees claimed were excessive. The question was referred to an auditor, who took testimony. The physician relied chiefly on a pocket visiting list (not that one published through the office of this journal), but the auditor threw out that record as an insufficient one, and not up to the legal requirements of the case. Exceptions were taken to his ruling, and argument was held before Judge Ashman. On account of its great importance, we quote the judge's opinion in full:

"The rule of evidence which introduces a tradesman's books of original entries to prove his sales is permitted to override the principle that a party may not manufacture evidence for himself, on the ground of convenience. It cannot be said to have been dictated by necessity, because in England, where these books serve only as memoranda from which the party producing them may refresh his memory, it has been found, according to Mr. Best (*Best's Evidence*, 853), that all the advantage, without any of the danger, incident to this character of proof, is obtainable. For the reasons which justify its use in the case of a merchant, it has been so far extended as to embrace, perhaps, the books of any person whose business is not in money, and is of such a nature that its transactions can be itemized with the precision with which a sale may be recorded. It is perfectly consistent with this broad statement that a doubt should have been expressed in *Hale's Executors v. Ard*, 12 Wr. 24, whether the books of an attorney containing charges for advice are evidence. Such entries, as was there said, must be incapable of certainty in description, because the services themselves are indefinite in their nature, and can neither be gauged by the time they occupy nor compared with other similar services with which a jury is supposed to be acquainted. But this objection can scarcely be said to apply to the record kept by a physician. It may cover a daily entry of each visit, with the name of each patient, a list of the medicines furnished, and the price which custom has fixed for the particular service. Such a record will comprise all the incidents of certainty of time, person, labor, and value, and each entry will be complete in itself. No more than this is required in the books of an artisan, and the measure of necessity is at least as great in the one instance as the other. If the proposition has been correctly stated, it affords an easy test of the validity of the proof submitted by the claimant. His diary, or visiting list, as a physician, contained on each page a list of names of patients, with tally marks opposite, in columns which were headed separately with the days of the week, the name of the month appearing at the top of the page, and the date of the year on the cover. One column at the end of the space for each week was headed 'amount.' Preceding these lists as a sort of preface to the book, was a 'Table of Signs.' This table embodied a series of hieroglyphics and figures, which were intended to denote visits made and to be made, and visits repeated or to be repeated; consultations proposed or made; services at the office; visits at night;

medicines furnished, etc. It is quite clear that entries patterned after this fashion could serve, at best, only as memoranda from which to make more formal charges. As original entries, even if decipherable, they were incomplete, because their form admitted only of a weekly charge in money, and in point of fact no charge at all appeared to have been made. Allowing the utmost latitude to the plea of convenience and necessity, the law cannot tolerate as self-proving an entry of services which can be translated only by means of a glossary. Such a writing would be as unintelligible to an ordinary jury as a Hebrew Bible to a deputy sheriff. The auditing judge, therefore, properly threw it out of the case. The sum which he finally awarded to the claimant, we think, was all that was shown by the oral testimony to be due.

"The exceptions are dismissed and the adjudication is confirmed."

We are not aware that this point has been covered by any decision of the Supreme Court. But it is at least very doubtful if the higher tribunal would reverse the above opinion. It will be prudent, therefore, for physicians who intend to carry into court their claims for professional services, to prepare themselves to meet the position above taken by the auditor and the judge. They must keep such a system of records as shall meet the demands of the principles of commercial jurisprudence above laid down.

NEW MEDICAL COLLEGES.

A somewhat surprising bill was introduced a few days ago in the United States Senate by Senator Call. It contained the magnificent project of establishing a medical college in Washington with a permanent endowment of one million dollars! This sum, we suppose, was to come from the plethoric purse of the central government. If the government is going into this sort of business, a medical college is as good as anything else to establish: but Washington is no place for it. Nor has it been generally supposed that it is part of the functions of our government to start colleges for professional education. As the full bill has not reached us, we merely make this passing comment on this extraordinary fact.

New York papers state that the Regents of the

University at Albany have refused a charter to the United States College of Medicine and Surgery of New York city. It apparently impressed itself on the Regents that a multiplication of colleges must lead to a deterioration of the course and facilities of medical study. It is true that competition is a positive advantage up to a certain point; but beyond that, it is sadly deteriorating. An instance of the latter was lately shown by a medical college in Louisville, Ky., which distributed a circular to the first course students of its neighbors, advocating its own merits, and offering its cheapness and the like, in a manner savoring of the lowest arts of a Bowery Cheap John establishment.

From a letter before us we have been favorably impressed with the prospects of the medical college lately established in Quincy, Illinois. That city is a thriving and beautifully-located railroad centre on the Mississippi. The inhabitants are about 35,000 in number, and its hospitals and clinical facilities are unusually ample for a place of that size. The general educational advantages there are exceptionally good, and its central and accessible location is much in its favor. The faculty of the college are chiefly resident physicians and surgeons, some of whose names are widely and favorably known in medical literature. We wish it every success.

NOTES AND COMMENTS.

Notice the Date.

Subscribers will oblige us by taking note of the date which they will find on the printed address on their REPORTER or its wrapper. This date shows the time up to which they have paid. It serves as an acknowledgment of the receipt of remittances. It also shows when the subscription is due; and we would earnestly ask those who find that this is the case, to remit us at once, as prompt payments relieve us from much correspondence, and the unpleasant necessity of personal reminders.

To Abort Mammary Abscesses.

Dr. James Braithwaite writes to the *Lancet*, December 15, 1883, as follows: *will be found in*
 "In cases of threatened mammary abscess, I
in which he says

have for many years, with very successful results, given three consecutive doses of ten grains of quinine at intervals of twelve hours, at the same time using the usual local application of belladonna. The administration of quinine in these cases, although its anti-suppurative power is well-known, is not practiced by any one with whom I have conversed, but I have myself found it so successful, that I think it deserves to be in general use, especially as the disease is so painful and so exhausting to the system. The best cases for the treatment are those occurring during lactation, and it is less suitable immediately after labor. It is unsuitable if the bowels are confined and the tongue furred. There are some patients who do not bear such large doses of quinine, in which case a first dose of ten grains may be followed by two of five grains each. I originally saw this treatment recommended in a French medical journal, and claim therefore no originality. I have frequently seen the pain and tenderness disappear within forty-eight hours, although a little hardness will remain for some days or longer, and the inflammatory symptoms may recur, and may be again at once checked by the same treatment. A recurrence, however, is rendered less likely if the belladonna is continued for a time, although pain has ceased. No doubt some will say that the success of the treatment is owing to the belladonna, and not to the quinine. I used the belladonna for years before I used the quinine in addition, and was struck with the greater rapidity and certainty of the result when the quinine also was used. At the same time I admit the difficulty, when two drugs are employed, of apportioning to each its real value."

Albuminuria and Phthisis.

Without going into details of the excellent papers which Dr. C. Theodore Williams has contributed to the *Brit. Med. Jour.*, December 22 and 29, 1883, it will be interesting to note that he considers the prognosis unfavorable when albuminuria appears, for he says:

"A careful study of our cases will disclose a very unfavorable outlook for the complication of albuminuria with phthisis. The patients died generally within a few months of the appearance of the first symptoms—one after a few weeks; and the longest case lasted but three months. Private patients, however, appear to live longer, and I know of some cases where life has been prolonged even for years. In the discussion on Dr. Sparks and Dr. Bruce's paper read before the

Royal Medical and Chirurgical Society on January 14, 1879, on the Effect of Diet and Rest in Chronic Nephritis, Dr. Quain cited a case of phthisis of fifteen years' standing, with albuminuria of five years' duration; and one of extreme albuminuria and extensive chronic phthisis, with but little influence on the general health. In one of my patients who has had phthisis for fifteen years, and a considerable-sized cavity for ten years, albuminuria supervened six years ago, and he still survives, although in a very precarious condition. Another patient, of twelve years' duration, has had slight albuminuria for one year, and is still able to travel, though living the life of an invalid. These are the longest cases I can recall; and they must be regarded as the exception, and not the rule. Many others whom I have seen have sunk a few months after the albuminuria set in; so that this symptom must, in all cases of phthisis, be regarded as of very serious import."

Poisoning by Bryonia Dioica.

Dr. S. B. Mason thus writes in the *Brit. Med. Jour.*, December 1, 1883:

"About two weeks ago, I was hastily summoned two miles in the country to see a child, aged 4 years, supposed to be suffering from eating some red berries given by children while at play. From the description given by one of the children, I came to the conclusion that the child had eaten berries of the red bryony. On examination, I found the child apparently in great pain in the abdomen, very thirsty, hot, and excited. With some difficulty I administered one scruple of powdered ipecacuanha, with ten grains of sulphate of zinc, in warm water. In due course this produced copious vomiting, together with a free action on the bowels. I waited about twenty minutes, and as no further vomiting occurred, and the pain in the abdomen continued, I repeated the emetic. This excited the vomiting again. The first vomit contained portions of about a dozen berries, the second about half that number; and one or two ejections in the course of the night simply contained fluid colored with the juice of the berry. The child was put to bed with a warm poultice over the abdomen, and some senna-tea administered, which operated freely, bringing away several skins of the berries. On the following day the pain had ceased, but the temperature in the axilla was 103°. A saline mixture was given, and for the next three days the temperature kept up, but, after that time, gradually subsided, and the little fellow recovered his normal

state of health. On first seeing this case the pulse was very feeble, but, after the vomiting, it increased in power wonderfully."

Nutrient Enemata in Reflex Vomiting.

Reflex vomiting from a uterine cause had reduced to a condition of extreme exhaustion a patient, about whom Dr. Quinlan writes in the *Lancet*, December 15, 1883.

The nutrient enemata employed in this case consisted of two ounces of very good beef-tea with one of milk. To these fluids mixed together and heated to 120° F., a teaspoonful of Benger's pancreatic fluid was added, and the whole was allowed to remain under a cosy for twenty minutes. A dessertspoonful of brandy was now poured into the enema, which was administered blood-warm. In using these nutrient enemata, whether of beef-tea, milk, or eggs, it is not always remembered that the large intestine has no peptonizing apparatus for rendering colloid substances dialyzable. As a consequence they do not pass through the mucous membrane, and a feeling of distension is experienced, often ending in the expulsion of the remedy. A peptonized enema causes no feeling of distension, or at least one that soon passes away; and any patient who has tried both ways will at once tell the difference. Sometimes in prolonged enematisation the bowel becomes very irritable, and in this case the addition of a little opium (if the other symptoms do not contra-indicate it) is most valuable. It is hardly necessary to add that nutrient enemata should not as a rule exceed four ounces. It is better to repeat them often than to run the risk of expulsion attending the use of larger ones.

The patient's strength was thus maintained until the gastric irritability subsided.

A Convenient Way to Stretch the Sciatic Nerve.

In the course of his paper on "Nerve-stretching for the Relief or Cure of Pain" (*Lancet*, December 15, 1883), Dr. John Marshall says:

"Before concluding I must ask you to bear in mind that the cutting operation to which I have alluded hitherto, is not the only way of stretching nerves, for it has been found in case of the sciatic that if you bend the thigh upon the body, so that the knee comes up to the chin, and then straighten the leg upon the thigh and flex the foot upon the leg so as to stretch the ankle-joint also, you can produce an extraordinary strain and tension upon the sciatic nerve as it passes out of the pelvis. Trombetta, who is a great advocate

for this method—Billroth has the credit for introducing it, but I believe Trombetta was earlier—found that the sciatic nerve in the dead body could be stretched one inch by this proceeding; but the proceeding must be tolerably firm and resolute, and I would say, in order that it should succeed, it should be continued for five minutes. That is the sort of rule I would lay down in all these cases. Mr. Horsley has stretched the sciatic nerve on the dead body in this way, and has found that it does diminish the diameter of the nerve."

This method should be tried in obstinate cases of sciatica.

Experiments with the Sputa of Phthisical Patients.

A foreign contemporary tells us that M. Vignal has been trying some experiments with the view of ascertaining whether the sputa of phthisical patients as found in the streets still contained bacilli. He collected a certain quantity of such sputa and submitted it to desiccation; he then moistened it and let it dry again at different times, so as to place it as much as possible in the condition in which it would be found in ordinary circumstances in a room. He discovered that the sputa thus treated contained bacilli as numerous and as well formed as if they had just been expectorated. He inoculated two guinea-pigs with the matter; one of which died in a few days from obstruction in the bowels, and he could not in consequence come to any conclusion; but the second animal, though it increased in weight during the first few weeks subsequent to the injection, afterwards began to lose flesh, and died in about three months. At the autopsy it was found that in all the organs there were a great number of tubercles which contained bacilli. M. Vignal concludes that sputa of phthisical patients, as found on the ground, in the streets, or in apartments, are far from being inoffensive, and might become agents of contagion to persons predisposed, or in whom the bacilli would find a favorable soil for propagation.

The Medicinal Properties of Arlentin.

The *London Med. Rec.*, December 17, 1883, says: Arlentin, the alkaloid of uva ursi, is a potent diuretic, and, according to Dr. Mensche, becomes converted into hydrochinon and sugar by boiling with acids, or under the influences of fermentation. Dr. Mensche (*Centrabl. für Klin. Med.*, No. 27, and *Centrabl. für die Med. Wiss.*, September 29), gives the following as the results of his observations upon the action of this alkaloid: 1.

In many cases it has proved to be a valuable diuretic. 2. It may be given in large doses without detriment. 3. It becomes converted into hydrochinon in the human urine. Its action as a diuretic was noted in two cases; in one, a case of mitral insufficiency, enlarged liver, and albuminous urine, the quantity of urine was augmented by about four ounces in twenty-four hours. In another case (tubercular peritonitis) the quantity of urine was augmented by about six ounces daily. In another instance the amount of the excretion was doubled under the influence of arlentin. This medicine has, however, Dr. Mensche reports, a specially beneficial action in vesical catarrh; and he suggests its employment in the place of uva ursi. In gonorrhœa, the author considers that it may supersede the use of injections by its conversion in the urine into hydrochinon.

Cause and Mechanism of Flat-foot.

The *Med. Times and Gaz.*, December 29, 1883, tells us that Dr. Hermann von Meyer, Professor of Anatomy in Zürich, after a careful examination of the normal and of the flat-foot, anatomical as well as clinical, comes to the following conclusions, which, as will be seen, are somewhat at variance with the generally accepted views: Flat-foot does not depend on destruction of the arch of the foot, but on a valgus position of the foot, and chiefly of the os calcis, with regard to the astragalus, together with, as a complemental and secondary condition, version upwards and outwards of the fore part of the foot. The deformity is not due to relaxation of the plantar ligaments, but depends rather on exaggerated rotation inwards of the astragalus, and on subsequent changes in the conditions of the plantar bones, due to the atrophy resulting from mutual pressure. The present brochure ("Studien über den Mechanismus des Fusses," part 1, published at Jena) is the first of three in which the normal and pathological conditions of the foot are to be discussed. We shall look forward to the others with some interest; the second will deal with the normal mechanism of the foot, and the last will complete the subject by discussing the various forms of club-foot.

Iodoform in Obstetric Practice.

The germ theory of puerperal diseases has called into vogue the treatment by germicides, which really constituted the essence of the treatment recommended by Dr. Thomas, to which we recently referred. In this connection, we note that Ehrendorfer (*Arch. f. Gynakologie*) has had

good results, in a limited number of cases, where, in, on account of instrumental delivery or other causes, infection was to be feared, from the use of iodoform. The method employed was the following: The uterus, after the expulsion of the placenta, was washed out with a solution of carbolic acid (one per cent.), and then a bougie containing five to ten grammes of iodoform was pushed into the uterine cavity beyond the inner orifice, and allowed to remain there. No vaginal injections were used afterwards, and only in seven cases was a second bougie introduced. This method was employed in twenty-seven cases; of these three died, and two were transferred to other parts of the hospital. There were but two cases of natural labor amongst the number; the rest were cases in which operative interference of some kind had been necessary, or cases of abortion with retained placenta.

Corrosive Sublimate in Phthisis.

Growing out of Koch's demonstration that corrosive sublimate is fatal to the activity of the tubercle bacillus, Dr. E. P. Brewer, of Norwich, Conn., writes to the *Med. Record*, January 5, 1883, that he has devised an apparatus for its use in phthisis, which he thus describes: He uses oxygen as a medium for carrying this drug into the lungs. The apparatus consists of a tank holding one hundred and twenty gallons of oxygen at a pressure of one hundred and twenty-five pounds per square inch; a wash-bottle and a drying-bottle, such as are ordinarily used for washing and drying gases. Finally, a metal receptacle holding eight ounces and heated by a lamp. In this receptacle is placed a solution of corrosive sublimate 1 to 800 or 1,000, and heated. The oxygen passes through the washing and drying-bottles, then through the hot and partially vaporized solution of corrosive sublimate. It then passes out through a rubber tube and is inhaled. Dr. Brewer is not yet prepared to report upon the practical results achieved by the use of his apparatus.

Poisoning by Jequirity.

From the *London Med. Record* we learn that Dr. Lagleize was called to see a youth, aged 19, who presented the following symptoms: The face was swollen, the eyes staring; there was great salivation, as after an injection of pilocarpine; the pulse was small and weak (180 to the minute), the skin dry, the extremities cold. While he was wondering what could have given rise to these symptoms, Dr. Lagleize noticed on the ground

some little seeds, which, on picking them up, he recognized as the seeds of jequirity. On interrogating the family as to whence they came, he learned that a friend, recently arrived from Brazil, had brought them as curiosities. As the symptoms were somewhat like those produced by pilocarpine, he administered an emetic of ipecacuanha, and afterwards sulphate of atropine in a mixture, and applied warmth to the extremities. The patient soon recovered, and the next day was pretty well.

SPECIAL REPORT.

NO. XV.—OPHTHALMOLOGY.

BY C. S. TURNBULL, M. D.,

Oculist to the German Hospital, Philadelphia.

From the Progress of Ophthalmology During the Second and Third Quarter of the Year 1882, by H. Magnus, of Breslau, and Others.—Archiv. Ophthalm., vol. xii., No. 1.

[Translated by Dr. F. E. D'OENCH, New York.]

The Influence of the Slanting System of Penmanship upon the Eyes of Children. Bay. *Ärztl. Intelligenzblatt*, vol. xxix., No. 21, 1882. Schubert insists upon placing the book parallel to the table's edge, and would exclude the inclined system of penmanship entirely from the schools, as the difference in the distance of the two eyes from the point of fixation produces unequal accommodation, which may easily lead to the loss of binocular vision; and further on, to difference in refraction and visual power, and, finally, to squint.

Berlin denies these conclusions. The act of writing is controlled by the eye, in particular by the laws which govern the movements of the eye. As the downward stroke is always perpendicular to the base line, it must cross the latter, when writing with letters inclining to the right, from the left side and above to right side and below. The consequence is, that when the book lies straight the child must sit inclined to the right, may sit straight when the book is placed obliquely, and when this position is exaggerated, must sit inclined to the left. The inclined system of penmanship, when the book is placed obliquely, has this advantage over the vertical system, inasmuch as it requires much less muscular exertion, the vertical system calling all the muscles of the arm up to the shoulder into play.

Ophthalmoscopic Examination of the Eyes of 150 New-born Children. Nagel's Commun. from the

Ophth. Clinic at Tübingen, vol. iii., p. 144. Schleich found the eyes of the new-born to be hyperopic, the same as Königstein, Horstmann, and Ely. According to the observations of Albrecht, the degree of refraction was the same in both eyes in forty per cent. of 1,638 cases examined. In 50.6 per cent. of 940 cases, the result of the examination of both eyes was the same with the ophthalmoscope as with glasses; in the remainder there was a difference. Out of 1,120 cases there were 417 with high degrees of myopia, *i. e.*, more than 6 D. 41 (10 per cent.) of these showed no traces of atrophy of the choroid, or sclerectasia. Cases were also observed in which an increase of the degree of myopia without convergence or accommodation could be demonstrated.

Studies Over Myopiers Etiologi. Copenhagen, 1882. Tscherning draws his conclusions from the observation of 9,567 persons. He distinguishes three kinds of myopia:

1. Myopia from unknown causes, not due to close vision or diseases of the eye, perhaps to hereditary predisposition. This kind of myopia is either congenital or develops up to the age of twenty-five. The fundus is normal; there is either no conus, or only a very narrow one. Vision is generally good. As a rule, only the lowest degrees of myopia belong to this category.

2. Myopia due to too near vision is most common among the educated classes. It is less than 9D.=4 $\frac{1}{2}$ ''; on an average it about equals 4D.=9 $\frac{1}{4}$ ''. Sometimes there is a congenital predisposition. The anatomical changes are not yet sufficiently known. It is rarely complicated with choroiditis, but the conus is common.

3. Excessive degrees of myopia (more than 4) are governed by another law in their distribution. They are found in all classes of society, without regard to their occupation; they must be regarded as a genuine disease, and are comparatively rare, scarcely in more than one per cent. of the population.

This form of myopia is always due to an elongation of the globe, and is generally complicated with other diseases of the eye, especially of the choroid. It is probably a chronic form of choroiditis, with exudations into the vitreous.

Cases of Unusually High Degree of Accommodation Spasm, Myopia Simulated by Hypermetropic Eyes. Med. News, May 6, 1882. Harlan reports three cases of spasm of accommodation, in which myopia $\frac{1}{2}$ resp. $\frac{1}{3}$ was found before using atropine, but afterward hypermetropia $\frac{1}{8}$ resp. $\frac{1}{3}$ and $\frac{1}{2}$.

Sudden Paralysis of Accommodation Completely Re-

stored in a Week. No specific cause. Ophth. Rev., Vol. 1, May 1882, p. 183. Griffith reports recovery from paralysis of accommodation in course of a week, after the use of quinine and strychnine.

Five Lustra of Ophthalmological Practice. Page 274. Mooren mentions the rapid fatigue of the ciliary muscle after severe illness, in sensitive women and onanists. He saw sudden spasm of accommodation develop after injuries in the ciliary region, also in uterine diseases and long-continued close vision.

Une Nouvelle Operation du Ptosis. Ann. d'Ocul., vol. lxxxviii., p. 29. Wecker describes a new method for ptosis, which consists in a combination of that of Pagenstecher and Gräfe. As in Gräfe's method, an oval piece is cut out of the skin and orbicularis muscle of the upper lid, after which two sutures are applied, similar to Pagenstecher's method, one in the inner, the other in the outer part of the lids. The needle is introduced over the inner part of the eyebrow, a finger's breadth above the orbital margin, passed downward under the skin and muscle, out again at the upper margin of the wound, under the edge of the excised orbicularis muscle, entered again under the edge of the orbicularis muscle of the lower margin of the wound, and passed along under the skin of the marginal part of the lid, and then back again, so that the points of entry and exit of the needle are above the eyebrow, about $\frac{1}{2}$ mm. apart. The two ends of the thread are then tied over a little roll of leather. In the same manner a thread is passed through the outer part of the eyebrow and lid. When the threads are tied, the edges of the wound are brought in contact, and should heal by first intention. As soon as the threads have cut through the skin at the margin of the lid, they are removed.

D'Une Modification Apportée au Procédé dit de Transplantation du sol Ciliaire. Arch. d'Ophth., vol. ii., No. 3, p. 208. Panas modifies the method of Anagostaskis in transplanting the lashes, by detaching the flap of the skin as far as the margin of the lid, leaving it only connected with the conjunctiva, then severing the orbicularis muscle and pushing it upward. He then unites the flap with the ligamentum-tarsi-suprius.

On the Treatment of Entropium and Trichiasis by a New Operation. Liverpool Medico-Chir. Jour., July (1882), p. 319. In operating for entropium and trichiasis, Williams makes Burow's incision of the tarsus from the conjunctival side, passes sutures to the outer side, as in the operation of Anagnostaskis and Snellen, and ties the thread on the external surface of the lid.

Del Autoplastic Palpébrale par le Procédé de Gayet. Ann. d'Ocul., Vol. lxxxviii. p. 132. Dianoux operates for entropium as follows: He makes an incision parallel to the margin of the lid, four mm. from its edge, passes Guerin's double-edged knife into the margin of the lid behind the lashes, and thus divides it into an anterior and posterior plate. He forms a strip of skin containing the lashes, and another three mm. broad above the first incision, draws the upper strip under the lower, and fastens the former in the position of the latter.

Ectropion Cicatriciel de la Paupière Intérieure. Operation avec Greffe Dermo-épidermique. Gazette d'Ophth., No. 11, 1882. In cicatricial ectropium of the lower lid, Carré cuts the cicatricial tissue, makes the lid movable, and freshens the edges of the lid. Flaps without a pedicle, which do not extend through the whole thickness of the lid, and then transplanted into the defect.

Weinlechner. The Treatment of Angiomata. Wiener Med. Blätter, 1882, Nos. 38 and 39. Advises to spare the skin of the lid, especially the edge and cartilage, when extirpating an angioma. A plastic operation should not be attempted at once, unless the indications are imperative; but the natural course of healing should be allowed to proceed, and an operation done later if necessary. It is especially difficult to remove the angiomata at the inner canthus. Here Weinlechner tampons the wound with styptic cotton, but does not unite the edges, in order that any remnants may be destroyed with lapis or the galvano-cautery from the wound.

Tumeur Érectile de la Paupière Supérieure Droit Chez un Enfant de 8 Mois. Rev. de Ther., No. 12, 1882. Humbert removed a tumor of the right upper lid of the size of an almond, by injecting a dilute solution of the sesqui-chloride of iron, which only produces a coagulation of the blood similar to that under normal circumstances.

Remarks on Important Cases. Rep. of the Mich. Eye and Ear Infirmary.

Lundy Removed a Varicose Tumor from a Child by Means of Electrolysis. The tumor was situated at the root of the nose, and had involved both eyebrows and half of the left upper lid. A battery with 22 elements was used. The introduction of the needles was followed by considerable reaction. Twelve days later they were again applied; at the end of three weeks scarcely a trace of the tumor was left, and the needles were introduced at only one point. The result was perfect, and only a small scar remained.

Parinaud. Fistule Dentaire Simulant une Fistule

Lacrymale. Journ. des Connaiss. [Med., 1882, No. 36. In a child seven years old, an abscess developed in the region of the lachrymal sac, resulting in a fistula. At the same time there was also a dental fistula of the carious upper canine tooth. Parinaud assumes alveolar periostitis with formation of a fistula, and explains its peculiar position by the peculiar arrangement of the alveoli of the upper maxillary of children. Cured by extracting the tooth in question.

Contributions to the Knowledge of Strabismus. Arch. f. Ophth. Vol. xxviii. 2, p. 97. Schneller reports his investigations on the field of fixation in cases of divergent and convergent squint. It is characteristic of accommodative convergent strabismus that the squint disappears either at once, or after a few days or weeks, when corrected with the proper glass, and that the extent of the field of fixation remains within the normal. Amblyopia of both eyes favors the development of convergent strabismus, though the degree of hypermetropia may be but a low one, also all the factors which tend to diminish the value of binocular vision. Muscular convergent squint disappears under the influence of the proper glass, either at once or after the lapse of a few days or weeks; the extent of the fixation field of the interni also exceeds that of the externi more than under normal conditions. In divergent squint the degree of strabismus is not entirely proportional to the preponderance of the external recti.

In strabismus with normal motility of the muscles, an operation is unnecessary—glasses will suffice; in muscular strabismus an exact examination of the field of fixation must be made in order to find a suitable method of operation. Schneller thinks that the most important result gained by his investigations is the distinction which must be made between refractive, accommodative, and muscular strabismus.

On a Case of Voluntary Nystagmus. Ophth. Hosp. Rep., vol. x., p. 343. Benson reports the case of a young lady of twenty-four who voluntarily could produce nystagmus.

Contributo allo Studio della Paralisi dei Nerve dell'Occhia. Casuistica Clinica. Amd' Ottalm., vol. xi., fasc. 2 and 3.

Rava describes the case of a young man of twenty, with complete paralysis of the six muscles of the eye and the levator palpebræ; the sphincter iridis alone was not affected. The power of accommodation could not be tested. The eye was slightly turned downward and inward, and could not be moved from this position. Although the disease had been preceded by a long-con-

tinued attack of intermittent fever, combined with severe headache, the author had to exclude a cerebral case on account of the intact movement of the iris, and designate the paralysis as simple rheumatic. Complete recovery after six weeks of electric treatment.

Affezione Dolorosa del Nervo Sopraorbitale. Neurotonia, Guarigione, Quadri Statistiche Frammenti d'Oftalmologia, Roma, 1882.

Angelucci performed *neurotomy of the supra-orbital nerve* with good result in a case of *intermittent neuralgia*, which had lasted two years. The accompanying *megrim*, as also the spasm of accommodation and of the orbicularis muscle, disappeared very soon after the operation.

A Case of Intermittent Neuralgia, with Retinal Irritation. Medizins-koje Obosamije, July, 1882, p. 71, Flatow reports a case of intermittent quotidian neuralgia between the brows and in the lid, accompanied by extreme photophobia, cured by quinine.

L'Elongation des Nerfs et de ses Applications au Traitement de la Neuralgie du Trijumeau. Gaz. d' Ophth., No. 5, 1882.

Badal stretched the supra- and infra-orbital nerves in the cases of two women with neuralgia of the fifth nerve, paralysis of the oculo-motor, and atrophy of the optic nerve. The success was very moderate.

Contribution à l'étude de l'Élongation des Nerfs Craniens. Arch. d' Ophth., vol. ii., No. 4.

Alexandroff stretched the supra-orbital nerve in a very nervous man of thirty-one, who suffered from severe blepharospasm on both sides, *tic douloureux*, and *hyperæsthesia of the skin of the face*. On the right side of the brow there were old scars. On the right side complete success was obtained; on the left, marked improvement.

Clinical Contributions to the Knowledge of Orbital Tumors. Inaug. Diss., Zurich, 1882.

Huber publishes two cases of bony exostosis of syphiloma of the roof of the orbit, one of adenoma in the orbit, one of a round-celled sarcoma beginning in the right lachrymal gland, one of a spindle-cell sarcoma of the same origin, and one of a congenital dermoid cyst of the orbit. The majority of these cases were operated upon. They proved that tumors which generally are considered very dangerous may be removed with the best results, and that enucleation, besides, is necessary in only the worst cases. One eye, which had undergone considerable changes, recovered its normal condition and functions to an unexpected degree. The results of the operation seem to indicate that a number of anomalies of structure and function

of the globe are due to simple mechanical influences.

Osteoma of the Orbit The Lancet, No. 22.

Hulke, in a girl of four, removed an osteoma springing from the floor of the orbit.

On a Case of Ivory Exostosis of the Orbit. Ophth. Hosp. Rep., vol. x., p. 303.

Twedy, in a man of twenty-five, found an ivory exostosis, which occupied the upper and inner part of the orbit, and had its origin in the region of the lachrymal sac. The autopsy showed that the tumor extended into the frontal sinus. The latter was so distended by it that the anterior lobe of the cerebrum had been displaced. The tumor also penetrated into the nasal cavity and into the sphenoid bone; here it had caused a basilar meningitis.

Enchondroma of Orbit. Brit. Med. Jour., April, 1882, p. 615.

Reid, in a young man of nineteen, removed a tumor of the outer wall of the orbit. It adhered to the periosteum and extended back as far as the optic foramen, and completely enclosed the lachrymal gland. Five months later the tumor had again formed, and was again removed. Microscopic examination showed it to be an enchondroma.

Cisti Orbitaria. Ussernazione Clinica. Gazz. d' Ospidali, Nos. 31 and 32. April, 1882.

Saltini. In a man of forty-seven observed a cyst in the right orbit. The globe projected 1 cm., was turned downward, and immovable. The fundus showed the usual symptoms of stasis. The cyst was cured by drainage. It contained crystals of cholesterine and hematoidine, and blood pigment and fat corpuscles. Saltini considered the cyst to be an acquired one, to be of serious kind, and to have perhaps sprung from the mucous sac lying between the tendon of the superior rectus and levator palpebræ.

Kystes Dermoides Periorbitaires. Observation d'un Kyste de la tête du sourcil. Gaz. d' Ophth., No. 8, 1882.

Carré. In a man of twenty extirpated a dermoid cyst the size of a pigeon's egg from the upper part of the orbit. The tumor, though scarcely visible, had been observed at the age of one and a half years.

Serous Cystic Tumor in Eyebrow. Trans. Oph. Soc. of the Unit. Kingd., vol. ii. p. 251, 1882.

Nettleship saw a large oval cyst at the orbital margin near the eyebrows. When punctured a thin yellowish liquid escaped, which soon formed again. By injecting tincture of iodine the tumor was reduced one-half.

(To be continued.)

CORRESPONDENCE.

Sewer Gas—The Germ Theory—Obstruction of the Bowels.

EDS. MED. AND SURG. REPORTER:—

There is a great deal written about the pernicious effects on one's health of sewer gas, impure air, defective ventilation, etc., etc., but what makes me skeptical about this matter is this; I know an old man—over 65 years of age—who enjoys most excellent health, very seldom having occasion to consult his physician, and yet this old man never cleans his teeth. The remnants of hearty meals, eaten perhaps months ago, are visible on his upper and lower incisors, and the odor of his breath is simply horrible; all the foul odors that one has ever had any experience of in the dissecting room and in performing post mortems are as attar of roses in comparison. This old man has been inhaling the foul exhalations from this decaying vegetable and animal matter, not excepting an intermixture of limberger cheese for years, and yet there is no visible impairment of his health. Is it any wonder that I am skeptical in regard to many of these fine-spun theories? Then again in regard to the theory that consumption is caused by a certain microscopical organism, the terrible bacillus. Well! I confess I have given some credence to the germ theory of disease, but this is too much. I cannot receive it just yet awhile. Perhaps when it is proven that tuberculosis is not hereditary, or that it is hereditary but that those ubiquitous bacilli have made their homes in the spermatozoon of the male or ovum of the female before impregnation takes place, and have in this way made their calling and election sure to this new mansion house, the body of the consumptive. I say, perhaps, when this germ-theory in regard to consumption has been reconciled with the theory of its being an hereditary disease, or the latter theory is abandoned as untenable, I may accept and believe in the new theory that consumption is a zymotic disease; but at present I am skeptical in regard to the existence of this bacillus as a cause of consumption.

Some time ago I had a case of obstruction of the bowels, accompanied with persistent hiccough. After trying a large number of remedies to control the hiccough, I think I finally succeeded by putting on a very tight bandage, covering the abdomen from the pubes to the mammae. Of course, I gave morphine, to relieve pain, in large doses, but it alone appeared to have little effect on the singultus, while the bandage stopped it instantly. My idea was, that steady pressure upward on the diaphragm would stop its tendency to spasmodic contraction, and so I think it did. The case recovered.

H. NYE, M. D.

Enon Valley, Pa., January 11, 1884.

NEWS AND MISCELLANY.

An Outrage that Appeals to Human Nature Everywhere.

The Lancet, December 29, 1883, says: "The treatment of the Nihilists in the fortress of Peter Paul at St. Petersburg, calls for a protest in the name

of humanity. If a culprit deserve death and the law of the country sanction capital punishment, then let the extreme penalty be inflicted, but with the utmost decency and promptitude possible. Should the authorities, however, think fit to commute such sentences or to sanction lesser penalties, such pretended mercy should be something better than a mere pretext to shield from public opprobrium the gradual torturing to death of helpless prisoners. Certainly medical men should have no share in such inhuman practices. The letter written in blood received from one of the noisome cells situated below water-mark in the prison of Peter Paul, and summarized by the *Times* of last Friday, has also been communicated to me, and I would call attention to some details not yet published in England. The food, which should be the same as that given to common criminals—but the amount is not specified in the regulations that apply to the political prisoners—is never enough. No tea is allowed; a little plain hot water is served for the prisoners to drink both morning and evening. But, either through defects in the water pipes, or from other causes, this water is always dirty, and sometimes fetid. There is a large proportion of sand in the prison bread, the gruel is generally mouldy, and on Wednesdays and Fridays, instead of cabbage-soup for dinner, they have pea-soup flavored with the coarsest oil. On Sundays a few shreds of meat are occasionally discerned in the soup. The diet and foul atmosphere soon produce diarrhœa and dysentery, followed by anæmia and scurvy. The elder physician, who has passed his eightieth year, never ventures into a cell; while his junior is so careful not to lay himself open to the suspicion of sympathizing with the prisoners, that he visits them surrounded by gendarmes and goalers, and does not dare to feel their pulses. He has, however, had the courage to reply to their complaints: 'Against your ailments we have no remedies'—an answer which, now that it has been made public, will probably cost him his post, if not his liberty. A lady suckling her child, Madame Jakmova, is stated to be left in an underground cell, to fight night and day with the rats that seek to devour her infant. Till the government has sufficient humanity to allow the medical officers to alter the diet and general regimen of their patients, it is mere hypocrisy to call in their services. The medical profession should resent this insult to their science. Their mission is to help to heal the sick, and not to aid a government anxious to rid itself of obnoxious political adversaries."

Post-graduate Schools.

The post-graduate schools, both in Philadelphia and New York, have been well attended this winter. At the "Philadelphia Polyclinic and College for Graduates," there have been 72 paying pupils in attendance, and between March 1st and December 31st last, there were over 3800 new patients in attendance.

The New York Post-graduate Medical School has been so successful that it has secured much larger quarters, which it will occupy in February. The total number of its students has been 140, and its clinical material very abundant.

It is gratifying to learn that the profession at large are availing themselves of the advantages of these special courses.

The Northwestern Medical College.

We publish with pleasure the following special dispatch to the *St. Joseph Daily Herald*:

JEFFERSON CITY, Mo., January 8.—The State Board of Health of Missouri, in session here to-day, fully exonerates the Northwestern Medical College, of St. Joseph, from all charges against it, and recognizes it as standing on a level with the best schools of the State. There was a full meeting of the Board, assisted by Drs. Rouch and Talifara, of the Illinois Board.

The Board were satisfied that the charges made against the college were unfounded, and the result of animosity.

International Congress of Hygiene.

The Secretary of State informs the *Med. Record* that "according to a note from the Minister of the Netherlands here, the International Congress of Hygiene will hold its next session at the Hague, on August 21st next, and that governments, states, corporations, etc., are invited to send delegates."

Ohio State Sanitary Association.

The first meeting of this association will be held at Columbus, Ohio, February 14 and 15. The address of welcome will be by Dr. J. F. Baldwin. Papers will be read by Drs. W. M. Beach, C. M. Finch, Prof. E. H. Hyatt, Dr. John McCurdy, James E. Reeves, and a number of others.

Measles in Baltimore.

For the last month quite a severe epidemic of measles has been prevalent in Baltimore, Md. At one time nearly 500 cases were reported. It began about December 1, and the mortality has been as high as about 20 per week.

Items.

—California's vineyards are rivaling her mines as a source of profit.

—There are about 2,400 female physicians in the United States.

—The British Ophthalmological Society has decided to found a museum and a library.

—The next session of the American Public Health Association will be held in St. Louis.

—Dr. A. F. Holt, of Cambridge, has been appointed Surgeon-General of Massachusetts.

—A new society, called the Gynecological and Obstetrical Society, has been organized in Paris.

—Dr. Gustave Rivet, *interne* of Charité, died recently of diphtheria contracted during his service in the hospital.

—A Government Quarantine Station for imported cattle has been permanently established at Garfield, N. J.

—Dr. Leonard Weber reports two fatal cases of diabetes insipidus in children in the *Amer. Jour. Obst.*, January, 1884.

—A bill to regulate the practice of medicine and surgery was recently introduced in the General Assembly of Virginia.

—Dr. W. W. Watkins has been appointed Lecturer on State Medicine and Hygiene, in the St. Louis College of Physicians and Surgeons.

—In the *Lancet*, December 29, 1883, Mr. O. C. Mawne reports a case in which colotomy was performed five weeks after ovariectomy, with recovery.

—Dr. W. A. Duncan showed the Obstetrical Society of London a large fibro-cellular tumor, involving the clitoris and both nymphæ, which he had removed.

—A so-called epidemic of chorea is said to have broken out in a girls' school at Moscow, and to have manifested itself simultaneously in eighteen different houses in which the school-girls reside.

—The statue of Liebig, at Munich, has been mutilated by the pouring over the entire left side of the figure of some dark colored liquid, which has corroded the marble. The perpetrators of the outrage have not been discovered.

—A man who abstains from liquor, as shown by insurance tables, at 20 years has a chance of living 44.2 years; at 30, 36.5 years; at 40, 28.8 years. An intemperate man's chance at 20 is 15.6 years; at 30, 13.8; at 40, 11.6.

—The New York Coroners' Statistics for the year 1883 are as follows: Sudden deaths from natural causes, 1,296; deaths without medical attendance (chiefly of infants), 1,231; deaths from accidental injuries, 414; suicides, 160.

—A physician of Syracuse has been found guilty of grave-robbing. The body stolen was that of a prominent resident of Camillus, a village near Syracuse, who died in March last, and it was discovered at the medical college in the latter place.

—The Michigan Legislature has passed, by a nearly unanimous vote, a bill requiring school teachers to pass an examination in physiology and hygiene, with particular reference to the effects of stimulants and narcotics on the human system.

—Dr. Meadows reports a foetus successfully removed by abdominal section from a suppurating extra-uterine cyst. The pregnancy had occurred about fifteen months previously. The cyst was stitched to the abdominal wall, and its cavity washed out.

—A committee has been formed, representing the profession in various parts of the country, to obtain funds for the erection of a monument to the late Dr. Sims in New York. Dr. Fordyce Barker is the chairman, and Dr. George F. Shradley is secretary.

—In the *Boston Med. and Surg. Jour.*, Dec. 13, 1883, Dr. Bradford reports a case of calculus in a child ten years old, which had evidently existed since babyhood. There was no history of blood or pain. He occasionally pulled on his penis, and at times held his water for twenty-four hours.

—There are not less than 200 graduates of medicine, says the *Chicago Med. Jour.*, who cannot spell correctly the word "diploma." The following methods are on record in the office of the

Illinois State Board of Health: diplomer, diplomy, diploma, diplomy, diplomah, dipluma, dipluma.

—*Virchow's Archiv* for December contains a summary, by Dr. Uhde, of Braunschweig, of the examinations of pork for trichinæ in the Duchy of Brunswick. The total number of carcasses of swine examined was 120,766. Of these, eleven were found to contain trichinæ, and 109 were otherwise diseased.

—The English census reports show that the proportion of the blind to the population has not only decreased with each successive enumeration since 1851, in which year account of them was taken for the first time, but the decrease in the decade ending in 1881 was much greater than in either of the preceding intervals. The number of cases in 1881 was 22,832, which was one blind person in every 1,138.

—The Duparque prize will be awarded by the *Société de Médecine*, of Paris, in 1885, for the best essay on the pathology of the ovary, and especially oöphoritis. Competing essays, which must be written or printed in French, should be sent to M. le Dr. Thorens, 34 Rue de Penthievre, Paris, before the 1st of January, 1885, and they must not have been published more than two years before that time. As the prize was not awarded in 1883, it will amount to 1,200 francs, in addition to the gold medal.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.:—

Dear Sir.—Having profited so much by the suggestion of the contributors of your valuable journal, in the prescribing of salicylic acid, I venture to ask you if you can be of assistance to me directly.

What combination has proved to be most successful in the condition known as menorrhagia? By placing this among your "Queries and Replies," you will greatly oblige,

Helena, Montana Territory.

W. B. W.

Jequirity in Granulated Lids.

EDS. MED. AND SURG. REP.

Please give particulars as to using jequirity in granulated lids, and oblige
AN EARNEST INQUIRER.

Ans.—Jequirity, the seeds of the *abrus precatorius*, was first employed scientifically by De Wecker, the famous Parisian ophthalmologist, who received the hint from a patient whom he had unsuccessfully treated, and who on his return to his home in Brazil subjected himself to the popular treatment, as it is known among the natives of that country. De Wecker, acting on the instructions furnished him, prepared an infusion by bruising the seed to a fine powder, and then adding the proper quantity of water and allowing it to macerate for twenty-four hours. This infusion applied to the conjunctiva possesses the peculiar property of exciting a specific inflammation, which, in the majority of cases, is of a diphtheritic nature. After this jequiritic inflammation has subsided, it is found that the trachomatous bodies have disappeared.

Dr. H. R., of Ohio, asks about the use of iodoform in gonorrhœa. It is mentioned as a valuable remedy in Napheys' *Surgical Therapeutics*, p. 574, on the authority of an Italian physician. The only objection to its use is its odor, which after all, is not particularly bad. We have ourselves directed it in herpes preputialis, with satisfactory results.

THE MEDICAL AND SURGICAL REPORTER.

No. 1405.]

PHILADELPHIA, FEBRUARY 2, 1884.

[Vol. L.—No. 5.]

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

BLOOD-LETTING IN THE YOUNG.

BY HIRAM CORSON, M. D.,
Of Conshohocken, Pa.

It was my good fortune to attend the lectures of Prof. Thomas Chalkley James, and to hear him say that in certain conditions of still-born children, we should draw blood from the cord to relieve the brain. In turning to his edition of Burns' Practice—then our text-book—I find on page 10 the following "In whatever mode children are still-born, the effect is referable, either to compression on the cord, first suspending and then destroying animation; or to pressure on the brain; or to a state of insensibility and feebleness, preventing the action of respiration from taking place." Then, again on page 11: "If, however, respiration do not begin, we are to open with a lancet or scissors one of the umbilical arteries, from which blood spouts in a small stream; and in a short time thereafter, breathing commences." This was the utterance of Prof. James in his advanced age after a life-long experience. I was fortunate, too, in hearing Prof. Dewees give the same advice to us—his pupils in the University of Pennsylvania—when adjunct to Prof. James; and now, in turning to his "Midwifery," published a few years later, I find the following on page 191: "The child, from being long-delayed in the passage, or from having its neck tightly begirt with the cord, may be still-born; in this case its face will be black, or livid and swollen; the arteries may have ceased to beat, or they may beat vigorously. In such cases,

nothing can save the child from immediate death but the instant abstraction of blood by cutting the cord. Should the pulsation have ceased, we may sometimes still succeed in drawing some blood by forcing it from the cord, and then employing inflations, etc. If pulsation continue we must also abstract blood by cutting the cord—the quantity to be drawn must be regulated very much by its effects. When respiration is established we need draw no more; but until some signs discover themselves of this being about to take place, we may abstract pretty freely, as this process most probably is interrupted by the congestive state of the brain, which can only be removed by pretty ample depletion." Dr. Dewees was a man very eminent in his department.

The eminent Prof. Hodge, who succeeded Prof. Dewees in the chair of Midwifery, seems to have believed in, and taught, the same practice; for I find in his Principles and Practice of Obstetrics, published in 1864, that he has given much attention to the condition of children born either in a state of complete or of partial asphyxia, and of the treatment of such cases he says, on page 214: "The treatment in both forms of asphyxia is precisely the same with one exception: in the congestive form where some activity remains in the circulation, and where the brain and heart are oppressed with a quantity of venous blood, experience proves that it will be advantageous to allow the vessels of the cord to bleed to the extent of half an ounce or more, after birth—for this purpose the cord may be divided without the application of the ligature."

Commencing practice influenced by such teaching, it has never occurred to me, during fifty

years of labor in the sick-room, to regard any age as prohibiting remedies useful in any other. The young child with an oppressed, congested brain, I attacked with the same means of cure that I had seen efficient in persons of mature age laboring under similar sufferings. I could not believe that the weak, puny child, comatose from congestion of the brain, or shrieking from inflammation of its membranes, should be left without the remedy which I had seen bring so great relief in older persons; and I have therefore, in years gone by, bled children in such affections with the most gratifying results—so in all affections where bleeding was useful in grown persons, I never hesitated to use it in children, however young. In croup cases, I have bled scores and scores of times with instant and marked relief; not *always* with permanent success, but oftentimes with immediate and ultimate relief. Let me describe a single case. Called at midnight, more than forty years ago, to see an adopted child, about one year old, a small, dwarfish child, of an unfortunate unmarried girl, I found it lying across its foster-mother's lap, the neck stretched out, and breathing like a child in the last stages of suffocation. As I approached it, the mother said: "Doctor, you have come too late; it is dying." And so it seemed indeed; but as it held on a few minutes, while I watched its labored struggles for breath, I proposed to bleed it; to which she offered no objections. It lay in a favorable position for bleeding from the jugular vein, and in less time than I have been talking about it, the blood was spouting into the bowl in the rapid way in which it comes from that vein. It soon fainted so dead that the mother said: "Doctor, you have killed it." I replied, "It does seem to be dead," but knowing how important a little shaking, and rolling, and lowering the head is in such cases, I lost no time in effecting these necessary movements, and directly there came a gasp, then another and another, and in a few moments it was as free from difficulty of breathing as if it had never had any. She still lives in the neighborhood, and has a large family of healthy boys and girls.

Some readers will say, *that* must have been spasmodic croup. Perhaps so; and yet I doubt whether a single one of those objectors can tell a case of spasmodic croup from membranous till after the post-mortem examination has testified. I have bled many quite young children from the arm, the foot, the jugular vein, in croup, and not once that I have regretted it. In scarlet fever I have bled them with great relief; quickly reduc-

ing the temperature and relieving the brain when convulsions were threatened or actually present.

Were it not that I now have always at hand a powerful and efficient means to accomplish the same purpose—namely, the pouring of cold water on the head from a height of two or three feet, and sponging the whole body with cold water—I should resort to the lancet in like cases as being infinitely preferable to the nauseating, depressing effects of *veratrum viride*, or the danger of poisoning from *aconite*.

I might say more on this subject, but I have, doubtless, already shocked the feelings of many excellent physicians who are filled with fear of the lancet, and with belief in the antagonisms of medicine, and the antipyretic powers of drachm doses of quinine, who see approaching septicæmia and heart-clot in every disease, and who are blanched with fear that in the battle daily waged by millions of bacteria on the one side and by the brave Lister and his hosts on the other, victory may perch on the banners of the former. We ought not to expect minds thus occupied to look back on the history of medical science; for of what value can the experience of men of twenty or forty years ago, who knew not the wonderful discoveries of the last decade, be to them, who have listened to recent teaching?

Many persons who are in favor of bleeding are afraid to bleed from the jugular vein. It was fortunate for me that I did not know of the danger which is now spoken of, as coming from the introduction of a bubble of air passing down the vein, when the pressure is removed in order to stop the bleeding, or from wounding a nerve. When the finger (you need no ligature) is pressed on the jugular vein, the vein above the finger becomes very prominent instantly; you open it with the lancet, and it bleeds rapidly; then, if the finger be suddenly taken from the vein, while the blood is running in the bowl, it is said that air may slip into the vein (which, below the finger, is supposed to be empty down to the sub-clavian vein), and pass directly to the heart, causing, it is said, instant death. Why a bubble of air carried to the heart should cause death, I do not know—indeed, I don't believe that it can—but I confess that I knew nothing of such a danger, and took no precautions against it, and no accident happened in any of my cases; but in doing it now, I would stop the blood by putting the finger of one hand over the orifice before I would take the other away from the vein, thus avoiding the *supposed* danger. I never happened to strike the small nerve which crosses the vein

or lies alongside of it; or if I did, it gave no sign of injury. I might crowd pages with cases of children bled in various affections. Within a year I have bled two children, under nine years, freely, to relieve them from pneumonia, and with prompt relief.

Thirty-two years ago I bled a child of only two years who had been poisoned by eating the green stalks of Jamestown weed (*stramonium*) four hours previous to my seeing him. I quote from my note-book: "The pulse was so frequent that I could not count it at all; the eyes wide open, and the child wholly blind—it felt about for things; nothing that was held before the eyes was noticed; even a lighted candle held before and close to the eyes was evidently not seen; the face was very red. Treatment: *Ipecac* freely, until free vomiting was produced and large quantities of the leaves and stalks of the plant thrown from the stomach; bled him freely and applied cold water to the head. The hands and feet being cold, mustard plasters were applied to the latter. In two hours there was an evident amendment—the child was quieter (there had been convulsive jerkings of the feet and arms, as though fits were coming); the pulse came down, was more regular, and could be counted. I had then been there three hours, and it was midnight—directed cold to be kept to the head, and left it. It fell asleep at 2 a. m., did not awake until 6, and then could see well and seemed quite rational. At 8 a. m. I found it quite well." I hear Mr. Objector say—"Well, what of it? What good did the bleeding do?" and I answer: "What harm did it produce?"—for your objection to it is, not alone that it is useless, but that it does great harm. Suppose that in a like case a physician of to-day had not bled it, but, impelled by the present fashion, had given antagonistic remedies, and in two or three days the child had improved as greatly, in spite of them, as it did in a few hours under the bleeding, would we not have had the case heralded as one showing the great value of the remedy which had, according to the most scientific teaching, been sent after the *stramonium*? Was bleeding a rational remedy? Yes. The present doctrine that poisons are absorbed, and act by being carried to the brain by the blood—to which I do not wholly subscribe—is pretty generally believed. Now, if that be so, the removal of a portion of this poison must be useful by lessening its amount, thus reducing it to an amount not fatal in some cases; but still more useful by protecting the brain from a fatal congestion. What were the symptoms? The face red,

the eyes wide open, the hands and feet cold, the pulse so frequent that it could not be counted, the child blind. Was there no congestion here? Was it not necessary to draw the poisoned blood away from the brain? What antagonistic remedy would have taken away the excess of blood that was pressing on the nerves of sight and hearing, making the child deaf and blind? I may sum up by saying that there is no child so young that bleeding may not be practiced for its relief, in all affections in which in adults it is admissible or useful.

I have thus truthfully presented a few cases to show that bleeding may be practiced with safety and advantage on children of any age, and on persons however aged; and in this opinion I but agree with many others who have had long experience in practice. The question arises now: How is it then that physicians who were used to see so good results from blood-letting gradually abandoned it, until now it is considered almost a useless and dangerous remedy, and instead of being taught in medical schools, is denounced in coarse and unmeasured terms as something to be dreaded? I have lived through the years in which this change was wrought, and the cause of it is to me no mystery. About fifty years ago the Thompsonians appeared with their hot and cold baths, their *lobelia* and No. 6, which made prompt and decided effects, and oft-times good results, and their rallying-cry was against blood-letting; "that the blood is the life; that no one has any blood to spare." We beg the objectors of to-day, and especially those who have graduated within a few years and are so loud and denunciatory of blood-letting, not to believe that their teachers, who are now claiming it as growing out of their observations, and as resulting from their experience, had anything to do with originating the hostility to blood-letting. They are only followers.

Even a few years before Thompson assailed us, Hahnemann came with his new system; and though he was gentle, not denunciatory of us, yet he made converts to his opposition to our bold, harsh treatment, so aggressive, as he charged, to the human system.

Then about forty years ago came the Eclectics, and claiming to select the best remedies from all sources, pounced upon calomel and our blood-letting as measures unnatural and fraught with danger and death.

Thus assailed, the timid and craven yielded; some sought safety by deserting our ranks, and others profit by joining in the hue and cry against

blood-letting, while they professed to stand with us in other modes of treatment. Medical teachers, fearful that their enemies would entice or frighten the pupils from the "Old Schools," as our colleges were derisively called, yielded as the timid and craven practitioners had done, and began to teach that a change had taken place in the human system, which rendered the abstraction of blood less necessary; and as they dwelt on this topic, they gradually, from year to year, came to believe that in no case should a person be bled, until now they fancy that this enlightenment came from *their* greater knowledge of diseases and remedies. I am well convinced that there has been no change in the nature of our diseases, or in the human system, which precludes the employment of blood-letting, either in the old or the young, or prevents it from being as efficient as it was half a century ago: and I offer these few cases as proof of my opinion.

In the letter which Dr. Michener sent to me concerning blood-letting in the old, he dwelt upon its use in the very young. He says:

"In relation to blood-letting in early childhood, I have performed it as early as the fourth or sixth month.

"In cases of recurrent or periodical convulsions in early childhood, I have found it beneficial, and in several instances it appeared to effect a permanent cure.

"Of letting blood immediately after birth, I can speak with more confidence; it has been almost a specialty with me.

"We sometimes find the veins of the cord remain distended, after the artery has ceased to pulsate; along with this, I have observed that the mucous membrane of the lips and vulva, etc., present a darker color; and what is more important, the child is slow in coming to its breathing, the inspirations being accompanied by a spasmodic effort and evidence of pain. There is hardly any case in which I have found blood-letting more relevant; an ounce of blood allowed to escape from the distended veins will generally afford immediate relief.

"The inquiry has hardly been sufficiently made how far this treatment would assist in the restoration of still-born children."

Strong testimony this. Wonderfully strong, if it had been uttered by even the weakest of professors; but as the utterance of a mere practitioner, it will be subject for laughter to students.

—A Japanese student has been appointed assistant to the Professor of Anatomy at Berlin.

MONSEL'S SOLUTION AS A TOPICAL APPLICATION IN DIPHTHERIA.

BY W. M. HEPBURN, M. D.,
Of Jeddo, Pa.

That I am taking up a subject fraught with many difficulties, I am only too well aware. I have but to look into a book written by one of America's brightest lights, to see the following emphatic statement: "As the local disease, in diphtheria, is only the visible manifestation of the constitutional infection, remedies applied only to the throat exercise very little, if any, control over the disease." Yet I turn to the writings of another honest and skilled practitioner, and find he informs us that "Diphtheria is first local, and afterward a general disease; that the poison of the disease finds a favorable nidus in the mucosa of the throat, and rapidly grows there; that the first symptoms of the disease are therefore wholly and exclusively local; and that it is only when the epithelial barrier is broken down that the blood and the whole body becomes infected." Confusing as such contradictions are, I nevertheless am convinced of the efficacy of certain drugs, used locally, in this disease. Whether we believe diphtheria to be at first a general or local disease, we may, I think, assert that the germs, be they vital or chemical, find their way into the system by direct implantation through the surrounding air, or by water and food. Could it be proven that the disease manifests itself first locally, then we should all eagerly receive any well-tested and approved local remedy. As it has not yet been satisfactorily shown that such is the case, we can alone by practical use of drugs, and in a series of well-tested cases, show their efficiency.

I remember reading an article entitled, "Topical Treatment of Diphtheria," in which the writer strongly advocated the use of the sub-sulphate of iron, applying it thoroughly to the throat and in an undiluted form. The article closed with the following words: "Nor do I recommend the persulphate of iron as a specific in diphtheria; I say for it only this: If I had to take my choice between it and all other kinds of treatment, general or local, I would select it in preference to all the rest."

This article, as is usual when any drug is vaunted as of much account in diphtheria, caused a great discussion, especially as to how it could be good when diphtheria is, from the first, a constitutional disease. Desiring to find out for myself the virtues of the medicine—the theoretical conclusions being, to my mind, entirely secondary—I determined, when the opportunity occurred,

to give it a thorough trial. Having since last spring been assisting a physician who has by far the greatest number of families under him of any gentleman in the state, and an epidemic of diphtheria occurring just at the time, I took my field. I not only used the Monsel myself, but requested one of my associates to also try it, which he promised to do. This fall another epidemic broke out. I did not, being very hard worked both times, keep a minute account of all my cases; but the results from the use of Monsel are most effectually impressed upon me—not only from my own experience with the drug, but also from what I know of the use of it in Dr. W.'s field, where I was called in consultation, and also from statements made to me by my associate.

I had altogether some twenty cases, varying from slight to very severe attacks. Dr. W. had forty-four cases, some of them slight, and might be called by some practitioners diphtheritic sore-throat. But, what is diphtheritic sore-throat? If an epidemic of scarlet fever should be raging in my field, be it mild or grave, have I not a right to call all cases of it scarlet fever? Slight or grave, is it not the same poison? And if I prove, by grave cases, that a certain remedy is efficacious in cutting short an attack, have I not a right to believe that many of these cases were light attacks owing to prompt treatment? Dr. Chambers, in his book entitled "Renewal of Life," strongly urges the prompt use of an emetic in the very incipency of typhoid fever, and has, apparently, convinced himself of his ability to cut it short by expelling and prohibiting further absorption of the poison. Nor is he the only eminent practitioner who believes in such results being attained.

Facts, after all, are what we want; and if renowned M. D.'s firmly believe they can cut short typhoid—a universally acknowledged constitutional disease from the beginning—does it seem ridiculous that in an affection in which the profession are at variance as to whether it is at first local—I say, does it seem ridiculous that an effort should be made to find a local remedy?

I before remarked that Dr. W. and I together had sixty-four cases. Of these, six died. Two of the deaths were in my field: the first, a child of six years, whom I was not called in to see until the fourth day of the attack, and the throat was then gangrenous. My second case, a boy twelve years old, was a very severe one. The throat was terribly swollen and covered by a diphtheritic membrane—the breath excessively fetid; yet by freely applying Monsel, I had the satisfaction of

seeing the patch disappear and the swelling subside; but unfortunately the disease attacked the larynx, and thus caused his death. Three of the four deaths in Dr. W.'s field, he tells me, were due to laryngeal complication; the fourth from hemorrhage. We made applications of Monsel undiluted, to all ages from eleven months to sixty-five years, and have yet to see any deleterious results from such heroic treatment.

But you naturally inquire, Don't you use any other medicines in conjunction with Monsel? Yes, I do. I use steam inhalations, chlorate of potash, tincture of the chloride of iron, quinine, and stimulants, if needed.

I suppose these acknowledgments may cause a smile to pass over my readers' countenances. Chlorate of potash, for instance, is vaunted by Dr. Seeligmuller, of Halle, Prussia, as a specific in diphtheria, even as much so as quinine in intermittent.

So again, we hear tinct. of iron and quinine exalted as the most efficient; but to add to my facts, let me state that I have allowed some of my patients—comparatively mild cases—to use only potash and iron. Their convalescence was *always* slow. On making an application of Monsel to an *equally* severe attack, I always look for marked improvement in 24 hours (my next visit). To illustrate: Dr. G.—another of my associates—had four equally bad cases in one section of his town. Two died. In these four, iron, potash, stimulants, etc., were used; Monsel was not. A fifth child was attacked; apparently, the disease had taken hold with as great violence as the others—aching bones, bounding pulse, temperature 103°, etc. He was called early, applied Monsel, and in 36 hours the child was running around the house, feeling good.

Do I believe Monsel to be a specific in diphtheria? By no means.

Sometimes any and all remedies seem utterly useless, but I would not be so cynical as to indorse the following statement, made by a well-known physician:

"Diphtheria depends upon a poison, whatever that may be, and the gravity of the disease is measured by the amount of the poison in the system—if this be of a certain quantity, the patient will die; if less, then he will recover."

The physician, like the commander of a ship, must face the storm and try to bring his precious cargo through.

Sometimes such a tornado bursts over him as to make him feel his utter helplessness, but *far* oftener he can face it with such courage and skill

as that all who stand by him have to acknowledge that his presence had much to do with the result.

How do I account for the happy effect of Monsel in this disease?

If we believe diphtheria to be local at first, and that the poison is gradually absorbed; then, that by powerfully constringing the vessels and thus preventing further absorption, Monsel accomplishes its task, might be a reasonable explanation.

If, however, diphtheria is to be constitutional from the first, I am at a loss to explain its virtues, and can but give you my knowledge of its practical effects, and leave it to you to use or discard.

A CASE OF "GALL STONES" OF TWELVE YEARS' STANDING.

BY J. E. HAINLINE, M. D.,
Of Cantril, Ia.

On December 10, 1882, I was called to see a gentleman who the messenger stated was suffering terrible pain, and could not possibly live long unless quickly relieved. I hastened to the residence indicated, and upon my arrival I found a man partially under the influence of chloroform, who seemed to be in great agony.

There was great anxiety in his expression. I advanced to the bedside, spoke to him, but he failed to recognize me. In answer to my question concerning the location of the pain, he clasped both hands to his right side and exclaimed: "It's no use to try to do anything, for I know I can't stand it long. I will soon be at rest." He continued in this strain for several minutes, occasionally calling for chloroform, which was poured upon a folded handkerchief he held in his hand, by his wife or some of the attendants, and which he immediately applied, covering his mouth and nostrils. This he continued until the pain was controlled.

Interrogating the wife, I was informed that on the 2d day of December he was taken with a similar attack; that he remained in bed five days, when the pain suddenly ceased, and having received a call to meet the county Board of Supervisors, of which he was a member, he started to the county seat. He remained away from home but two days, and returned, saying he felt badly. The same evening he was taken with a pain more violent than ever before, which gradually grew worse up to the time I was summoned. I found him very much jaundiced, the sclerotic was highly tinged by biliary matters, the liver enlarged, and the "gall bladder" greatly distended, as was also

the duct; bowels constipated, extremities cold, and heart's action weak.

Diagnosis was easy. There was spasm of the gall duct, produced by the attempted passage of biliary calculi. The condition of the patient at this time indicated that something must be done, and done quickly. I determined at once to withdraw the chloroform, and substitute therefor sulphate of morphia.

I was informed by the wife that he had tried morphia, and it did not seem to act well. She said the pain came on suddenly, and with such violence as to be unbearable; the chloroform acting rapidly, was used instead. I spoke of the dangers attendant upon the administration of chloroform, and also stated that the remedy exerted no curative effect.

I prepared the following:

R.	Morphiæ sulph.,	gr. ss.
	Aquæ puræ,	gtt. xlv.
Mx.		

Of the above I administered, hypodermically, fifteen drops. Within twenty minutes my patient seemed free from pain, and was resting quietly. I gave strict orders to have everything quiet in and about the room; to allow no one in the room except the nurse. Leaving half a grain of morphia, divided into two powders, to be taken during the night, should the patient become restless, I left, stating I would call in the morning.

I called the following morning, and found my patient vomiting and perspiring freely. He had thrown off considerable bile. I gave nothing to control the vomiting, deeming it an efficient means of cleansing the stomach, as well as relaxing the system.

In the evening I again called. The vomiting had continued irregularly during the day. I ordered small pieces of ice to be taken into the mouth, and permitted to melt before passing into the stomach; and in connection with this, I had also given a teaspoonful of fresh buttermilk every hour. In this manner I controlled the nausea.

On calling the following morning I was informed my patient had rested well, and that during the night he had had two copious stools, which I examined, and found to contain several small calculi, together with quite a large amount of bile, showing that the gall bladder had been pretty thoroughly evacuated. He was free from pain, the only discomfort being prostration and considerable soreness in the region of the liver and over the stomach. He was also very nervous.

I continued the same orders previously given, adding beef-tea to the diet. When I returned in

the evening, my patient was complaining of a slight pain again in the liver. I administered, hypodermically, fifteen drops of the morphia solution I had previously prepared, and left.

The following morning the patient was much improved, entirely free from pain, and very anxious to know what I thought of his case. Said he had been treated by several able physicians, but had derived very little benefit therefrom. I informed him that I must know more about his case before venturing an opinion as to a cure.

I obtained the following history of the case: L. W. C., æt. 56 years. Married; merchant. "Twelve years ago, while attending a public sale, was attacked with a severe pain in region of liver. Pain lasted two hours or more, when it suddenly left, and I felt no more of it for a month or two, when it returned. For past six or seven years it has occurred regularly every three or five weeks. Have used chloroform to control the pain, which has gradually, for the past year or two, grown worse. Am compelled to keep my bed for a week at a time. When pain leaves me I can go about my business, but feel weak and nervous for a few days. Scrofulous disposition; inveterate eater and smoker; not addicted to strong drink; have exposed myself; morbid appetite; in the habit of lunching freely just before retiring at night; in store have been in the habit of eating crackers, cheese, dried beef, raisins, etc." Friends told me he had often eaten nearly a pound of dried beef; very nervous and excitable; drinks two or three cups of coffee at every meal; bowels constipated, very much so for several days before attack; tongue heavily furred nearly all the time; liver enlarged; gall bladder also enlarged; slight palpitation of the heart after eating; occasional vertigo.

After a thorough examination, I informed the gentleman his case was curable; but that the cure was largely based upon his own actions. I said to him if he would only obey my restrictions I could promise him a cure. He promised to obey, but stated he had "no faith in the cure." With this understanding, I began the task.

The first step being to restore the digestive system to its normal condition, I gave the following directions: *Eat slowly, chew your food thoroughly, and drink nothing during meals, except in the morning after breakfast, take a single cup of coffee.* Avoid the use of pork; use beef, chicken, or wild game; use very little fatty substances; use no fried food; do not drink cold water for at least an hour before meals; use light bread and not soda biscuit; bathe in tepid soft water twice a week; smoke after eat-

ing, one cigar, and no more. To aid digestion, I prescribed the following:

R. No. 1.

R.	Pepsin,	3 iij.
	Ingluvin,	3 iss.
	Bismuth subnit.,	3 j.

M.—Divide into 27 powders.

Sig.—One powder ten minutes before each meal in one tablespoonful of sweet milk.

To keep up a good action of the liver, prevent stagnation of the bile, and the formation of calculi, I ordered:

R. No. 2.

R.	Podophylli peltati,	
	Leptandrin Virgii.,	āā gr. x.
	Sanguinaria canadensis,	gr. v.

M.—Divide into ten powders.

Sig.—One every night and morning.

The above was continued for four or five days, after which only one of the powders was to be taken at bedtime.

For the purpose of preventing a return of the regular attack, and dissolving any calculi which might form in the gall bladder, as well as relieving the irritation of the mucous membrane lining the duct, I prescribed the following:

R. No. 3.

R.	Ol. olivæ,	f 5 iss.
	Ol. terebinthinae,	f 3 ij.
	Ether sulph.,	f 3 iss.
	Ex. glycyrrhizæ fld.,	f 5 ss.

M.

Sig.—One-fourth teaspoonful four times a day for six days, then increase to half teaspoonful, and take three times a day. "Shake well."

The treatment above described was continued for six weeks, with the exception of "Prescription No. 2," which at times seemed to exert too great an influence on the bowels, and had to be suspended for a few days.

As there had not recurred the regular attack, and the patient had declared that he felt no symptom of its return, I made the following changes: For R. No. 1, I substituted the following prescription—

R. No. 4.

R.	Pepsin,	3 iv.
	Acid hydrochloric,	f 3 ss.
	Glycerinæ,	f 3 ij.
	Aq. destill.,	f 5 iv.
	q. s.	

M.

Sig.—Teaspoonful after eating.

Patient adhering closely to all directions. Condition greatly improved. Appetite becoming more natural. Liver considerably decreased in size. Eyes had become bright, skin clear, bowels regular, stools exhibiting a free flow of bile.

Gave one powder of R. No. 2 every three or

four days, and continued to give them whenever there was the slightest engorgement of the liver.

At the end of the third month withdrew all treatment except an occasional "liver powder," to which I frequently added during the fourth month a grain of proto-iodide of mercury.

Four months elapsed, and still no evidence of a recurrence of the difficulty could be discovered; digestive system performing its work satisfactorily.

During the fifth month, I ordered R. No. 4, to be taken morning and noon; and R. No. 3 at night in half teaspoonful doses. When there was a tendency to constipation, I ordered three of the "liver powders" (R. No. 2) to be taken in the afternoon, commencing at one o'clock, continuing every three hours until the three are taken. These powders were to be taken only when there was a tendency to constipation.

Sixth month. Withdrew all treatment, and my patient discharged. Up to this date (January 12, 1883,) there has been no return of the difficulty, and he has never lost a day from his business from the time he began treatment, except the first two weeks. Says he feels as well as he ever did.

One of the important features in the treatment of this case is his strict attention to the *physical laws*.

PRACTICAL APPLICATION OF MEASURES OF EXTREME CLEANLINESS IN ABDOMINAL SURGERY.

BY R. STANSBURY SUTTON, A. M., M. D.,
Of Pittsburgh, Pa.,

Fellow of the American Academy of Medicine, Fellow of
the American Gynecological Association, Associate
Fellow of the Philadelphia Obstetrical
Society, etc., etc.

Two years ago every surgical clinic on the continent of Europe, every operator of note in Great Britain, excepting *two*, and a great many American operators, were using carbolic acid either in spray or irrigation in surgery. The abdominal surgeons extended their use of the acid to instruments, sponges, wash-water, the surface to be operated upon, and to themselves. In fact, Listerism, pure or modified, was in use everywhere above mentioned, with a solitary exception. The exception was Mr. Lawson Tait, of Birmingham, England. Well I remember, at the session of the British Medical Association, meeting in Worcester in 1881, with what sly winks and significant looks of disapprobation his remarks on Listerism were received; and well I remember the speech I made in his defense upon that occasion. I had just finished a three months' visit to Dr. Thomas

Keith, and had become skeptical in regard to the wholesale carbolic acid system of treating wounds. At the late meeting of the American Gynecological Society, and also of the American Academy of Medicine, I advocated less carbolic acid and greater details of independent cleanliness.

The measures of cleanliness advocated in papers before these bodies, I have adhered to, using no spray or irrigation of carbolic acid since my return to the country in last February.

In this time I have done a large number of serious operations. Of these, the abdomen was opened in eight cases.

One of these cases was full of malignant disease, extending to the intestines and other organs, and after a bloody operation, in the presence of peritonitis, was lost from shock on the day of operation; fifteen pounds of sarcoma were removed, besides four gallons of ascitic fluid. The patient was a young woman, and the malignancy of the solid tumor in a belly full of fluid was not considered certain. Some twenty inches of intestines were separated from the tumor at the operation, and the pedicle of the right ovary was so soft that the ligature cut through it, and necessitated subsequent careful ligation in the ligamentum latum.

A second case, a multilocular ovarian cyst, seven years old, often tapped, and the subject of severe peritonitis, and then demanding another tapping or operation, was operated upon. About thirty-six square inches of adhesions were separated, and after considerable time all bleeding points were secured and the belly left clean and closed. She developed a furious peritonitis, and died in a few days. I was puzzled beyond measure in this case, as the most extreme care had been exercised. A few weeks later, however, I hit upon the probable cause, which was defective drainage and sewer-gas in the building. The operation was done in one of the best houses in the city, and the preparations and the details at the operation were simply perfect.

A third case was done in a private residence. The preparations were perfect, and the details of the operation were carefully carried out. I removed the left ovary and nearly four inches of the small intestine, diseased and adherent. The ends of the gut were carefully united with scalded silk sutures; a drainage-tube was left in the lower angle of the wound. This patient recovered promptly, and is still living and going about; it is now more than eight months since the operation.

A fourth case was done in the country. It was a double ovariectomy, both cysts large and multi-

locular. The patient was reported in good condition for several days later, then was seized with some complication about the abdominal wound, and was finally lost. I did not see her after the operation.

A fifth case was done in her own home in the city, a very poor hovel. The only thing to do was to operate or let the patient die. She was 65 years old; perfectly immense. The measures of cleanliness were badly carried out, from the conditions surrounding her. She did well for three days, and I had about concluded that she was safe. On the fourth day (July 4) a cannon was fired off near by. She raised up in bed, and accused the nurse of striking her on the head with something. She remained deranged, and died at the end of a week, apparently from exhaustion. Her wound was healed, and her symptoms had been anything but bad, aside from her mental distress. No iodoform had been used at the operation.

With the loss of all these cases, two in their own homes and two in a good residence, but with defective sewerage, I resolved to change my plans or stop operating.

In September I purchased a small dwelling house, on high ground, on the corner of two streets, with plenty of ground about it, and with unquestionably good sewerage, and opened it as my private hospital on the first of October, and all of my abdominal operations are now done there. The house is intended for only six patients at a time, and all its arrangements are made with a view to the welfare of the patients. In this house three ovariectomies have been done since October first. Every measure of cleanliness advocated in the papers referred to has been carried out, and the result has been success in every case.

In the first case a thermometer was never put in the woman's mouth, and her pulse did not reach 100 per minute. Wound healed by first intention. In the second case, the highest temperature was 100.2° F. In the third case, the highest temperature was 99 $\frac{1}{2}$ ° F.

The pedicle in all these cases, with the exception of the last, was tied with silk and dropped in. In the last case it was tied and burnt off with Keith's clamp and caustery iron, and the greater part of the omentum was treated in the same manner.

Not a drop of pus has appeared in the wounds, no fever worth mentioning has occurred, and recovery has been uninterrupted.

Now that the conditions believed to be necessary for extended success have been acquired, I pro-

pose to test them thoroughly, and to give the profession the benefit of them. I take pleasure in publicly thanking Mr. Henry Phipps, jr., of this city, for his Christian charity in paying the expenses of two of the last cases, both poor, but mothers of families of children dependent upon them to a great extent.

The same gentleman has placed in my hands a sum of money sufficient to pay the expenses of twenty more women who must have ovariectomy or hysterectomy done. The profession are invited to send any poor women requiring the operation. They will receive the same care as those who pay for themselves.

HOSPITAL REPORTS.

CONSERVATIVE TREATMENT OF TWO CASES OF CONGENITAL PHIMOSIS, WITH CUT OF INSTRUMENT USED.

CLINICS, OF WILLIAM S. STEWART, A. M., M. D.,

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Reported by JOHN S. STEWART.

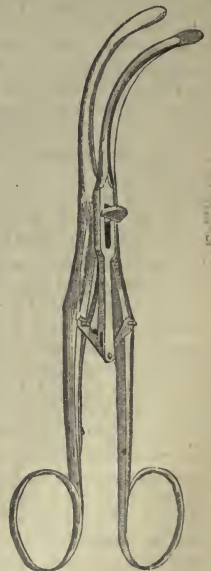
December 13, 1883.

GENTLEMEN: I have to-day a case which will be interesting to you, as I propose presenting a novel and original method of treatment which I have adopted in my private practice for some time.

Mrs. S— brings her child, aged eight weeks, suffering from what is called congenital phimosis; in other words, an abnormal condition of the penis. Attempting to retract the prepuce over the glans penis, we find ourselves unable to accomplish it, owing to an adhesion and contraction of the mucous or lining membrane, although the integument is not abnormally affected.

On examining this boy, we find the penis, scrotum, and surrounding parts, inflamed in consequence of his inability to micturate freely.

I hold in my hand an instrument which, although devised for another purpose, I have used in my private practice for several years for correcting these congenital accidents. This instrument, as you perceive, has three blades, and by introducing it into the narrow opening of the prepuce and expanding the blades we can very readily stretch the contracted mucous membrane suffi-



ciently to permit us to retract the prepuce until we can pass it behind the glans. Since adopting this method, I have not had occasion to perform circumcision, although in some instances the children had been suffering two or more years. Now, we will first place the child upon the table, on his back, and as this will not be a very painful operation, we will not administer any anæsthetic. I will now extend the prepuce in the line of the penis, asking an assistant to catch lightly one edge while I hold the opposite edge in my left hand, thus separating the parts; with my right hand I press the instrument gently within the orifice of the prepuce until I touch the glans, being careful that the point of the instrument does not enter the meatus.

I will now gently expand the blades; having completed the expansion, will withdraw the instrument and examine what has been accomplished.

We have succeeded in relaxing the redundant mucous membrane, but on withdrawing the prepuce back over the glans, I find persistent adhesion existing between them. This we will carefully correct by using a blunt instrument, as for example, a simple probe; and you observe as I near the corona I find deposits of caseous matter which have been secreted, and will be a source of irritation. This must be carefully removed and an application made of ung. petrolei to the parts—this being all that is necessary.

You see, gentlemen, we have had a bloodless operation, and one attended with little pain, compared with the old method of circumcision for such conditions. I will instruct the parent to retract the prepuce once daily, and to anoint the parts with cosmoline until our next clinic, when I will request to have him brought back, that you may be satisfied with the results of this method of treatment.

December 20, 1883—Gentlemen: Before bringing in any new cases to-day, I wish to present to you our little boy on whom we performed the conservative treatment of expansion of the mucous membrane for congenital phimosis. Both of the parents have come with the child to-day, because of their gratitude for the relief given him, the evidence of which we have before us.

[Here the Professor retracted the prepuce without any difficulty, the parts all being in healthy condition, and no irritation of surrounding integument as when first seen.]

January 3, 1884—Gentlemen: Mrs. B., a private patient from the country, yielding to my request, has brought her child, aged sixteen months, before us to-day—it having an affection similar to the one we treated a short time ago by my new method, which you recollect.

In this case of congenital phimosis there is almost entire closure of the orifice of the prepuce, and we are obliged to introduce a series of instruments, commencing with the small probe, until we are enabled to expand the opening sufficiently to admit this instrument, which we will christen "The Preputial Dilator."

[Here the Professor introduced the dilator and readily expanded the prepuce, and after withdrawing as before, dissected back over the glans, removing considerable caseous matter which had deposited around the corona; resulting as previously in a bloodless operation.]

REMOVAL OF RIGHT BREAST BY THERMO-CAUTERY AND FERRUM CÂNDENS.

CLINIC OF PROF. V. NUSSBAUM, MUNICH, BAVARIA.

Reported by Dr. J. H. VOJE, specially for the MEDICAL AND SURGICAL REPORTER.

November 19.

Gentlemen: This woman presents herself with a large tumor of the right breast. I do not think it is a cancer, because a cancer very seldom reaches the size this tumor has without ulcerating; besides, as you see, the woman, who is fifty-two years of age, is yet well nourished, which certainly would not be the case if the tumor of two years' standing would be a cancer. I intend now to remove this tumor with the thermo-cautery and red-hot iron, and not in the usual (certainly more elegant) way with the knife. Think, gentlemen, what a large surface of nerves and vessels I would expose, and the blood which would be lost, by removing this large tumor with the knife—enough probably to prove disastrous for a woman of the patient's age, especially as we would not be able to obtain enough flap to close the wound without much tension. Gentlemen, I have removed now a number of various large tumors of the breast in cases not suitable to be removed by the knife, and I always found that the patients not only had no shock after the operation, but they retained their good appetite, were able even to be around some, and had no fever; conditions we seldom acquire after a bloody operation with the knife.

The patient being well anesthetized, as much as possible of the skin was dissected back from the tumor with the thermo-cautery. As soon as the loose connective tissue between the gland and pectorals major, etc., was reached, large spade-shaped red-hot irons were used; these worked their way comparatively rapidly, while the thermo-cautery proceeded but slowly.

During the operation the Professor alluded to the harmlessness of the large hot irons. It might be thought that by keeping the irons in so close proximity to the pleural serous membrane, great harm would be done to the latter; but there was no danger, as the Professor proved by holding his finger under the pectoralis muscle, and a red-hot iron over it; he did not feel it. Meat is a poor conductor of heat.

The operation was completed in 25 minutes. The tumor was a sarcoma; weighed 20 ounces. The amphitheatre was literally converted into a smoke-house, but the result of the operation was excellent. The patient, with a smiling face, was presented for the first change of dressing on the 23d. The patient had had no fever, had good appetite, and the wound was not discharging, but healthy granulations were pushing everywhere through the eschar. Such wounds are dressed with a layer of iodoform gauze, over which is placed a large gauze-back filled with wood-wool disinfected with $\frac{1}{2}$ pro mll. bichloride of mercury. The wood-wool is now extensively used in the Munich Allgemeines Krankenhaus. It is very finely planed pinewood, and absorbs discharges better than anything I saw before. It is especially superior to the various antiseptic absorbent cottons, of which only the layers next to the wound ab-

sorb, and then form an impermeable felt with the discharges, keeping the wound not drained but flooded, unless the wound is dressed twice daily, a point not desirable. This every one will have experienced who has used the cottons much. With wood-wool this is avoided; it may be left on the wound until filled. It keeps the wound perfectly aseptic, and is cheaper than any other material.

Radical Operation for Inguinal Hernia: Royal Suture.

November 20.—Gentlemen: You find the room this morning uncomfortably warm; but we are about to expose part of the peritoneum, which membrane is very much irritated by cold atmosphere. Two steam atomizers have disinfected the room for one-half hour with carbolic acid. You also see that my five assistants and I wear long white linen coats, of which we each have one dozen, so that we can take every morning a clean one; their light color makes us immediately detect any blood or dirt upon them; no excuse, therefore, for bad washing. Over the coats we wear rubber-sheet aprons, and sleeves of the same material. We have brushed our hands and nails, and now wash them with a half pr. mll. bichloride of mercury solution, and moisten our sleeves and aprons with the same. During the operation we shall use the spray. You may think it pedantic that I use the latter; and, in fact, many operators do not use it at all; but, gentlemen, I would not be contented in my conscience towards this patient should I leave out the spray, especially when I think that maybe twenty or thirty of you have been working in the anatomical room not more than twelve hours ago. Let me here tell you an experiment Pasteur made: He took some fresh urine, boiled it, and immediately put some of it in a test-tube, previously heated to a red-hot heat, and closed the tube with cotton. Some of the urine he poured in another tube prepared in the same way as the first; but the urine was poured in under carbolic acid spray, and the tube was closed under spray with cotton. The urine in the first tube was stinking after twenty-four hours, while that in the second had not changed in ten days. From this, gentlemen, you may infer that the spray is of some use.

This lad has a right inguinal hernia—not a bad one—of which he, however, desires to be relieved. I shall, therefore, perform an operation on him, which I have, since 1875, hunted up again out of the armory of old operations. I shall close the hernial sac as high up as possible by the so-called royal suture, and remove the sac below entirely.

This operation proved mostly fatal when it was practiced long ago; but since Lister's great invention, we may perform it without fear. If the cure is a permanent one, I am not ready to say; it may in some cases, but I doubt in all. However, on the same side the peritoneum is not likely to give way again.

The patient, whose scrotum and pubes had been shaved, and who had for the last twenty-four hours a carbolic acid compress over the inguinal region, was now well anesthetized. The inguinal region was yet brushed with a $\frac{1}{2}$ pr. mll. solution of bichloride of mercury. Then the Professor dissected down upon the hernial sac. It took some time before the sac was found, as the gut had

entirely slipped back into the abdomen. When found, it was separated from the tunica vaginalis, and vas deferens, to which it adhered. The adhesions were also broken up a little ways up the inguinal canal. Then the Professor made a small opening in the sac, and by passing his finger into the abdominal cavity, convinced himself that he was in the sac. The latter was now pulled down some. Sewed it together high up with catgut, and passed a strong ligature of the same material just below the suture. The projecting part of the sac, about an inch and a half, was then cut away with scissors. After this the scrotal cavity was well drained, the wound closed with catgut, and dressed with iodoform gauze and wood-wool back.

On December 8, this young man was brought again into the clinic; the wound had entirely healed. It was impossible at this time to pass a finger up into the inguinal canal; it filled up and closed by adhesions.

MEDICAL SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

BY J. H. MUSSER, M. D.

Thursday evening, June 14, Dr. Tyson, President, in the chair.

A Case of Chronic Bright's Disease.

K. T., æt. 35, admitted to University Hospital, July 17, 1878; single; a packer of goods; frequently exposed to draughts while in profuse perspiration; used tobacco to excess; once or twice a year he would spree. At twenty-two he had a chancre. (?) No secondary symptoms. Three times he had gonorrhœa. Always healthy prior to present illness; never had rheumatism.

The patient inherited a tendency to phthisis from both parents, and to rheumatism from his maternal grandmother.

The onset of the present illness was observed two years ago by a sudden night attack of dyspnœa. The dyspnœa continued for nine weeks, worse at night and preventing work in the daytime. Œdema of the feet and frequent micturition accompanied the dyspnœa. He improved, to have a relapse in four weeks of a month's duration, followed again by temporary improvement and a third relapse. From the latter he never rallied, Œdema, cough, dyspnœa, frequent micturition, and dyspeptic symptoms being constantly present. The cough was dry and attended by sub-sternal pain. The Œdema was general. When admitted to the hospital under the care of Prof. Pepper his condition was as above mentioned. During the July, August, and September following, the asthmatic attacks continued. In October they were relieved, but the anasarca became more pronounced.

It may not be out of place to say that the dyspnœa was very severe, and almost defied treatment. It presented the clinical characters of uræmic asthma, and was relieved only by inhalations of nitrite of amyl, or by hypodermatic injections of morphia. The anasarca was very great, and not relieved by diuretics, diaphoretics, or cathartics.

In October acupuncture was resorted to with temporary relief to the lower extremities and scrotum, its good effect lasting five days only, but being so marked as to encourage one in its use. During the following three months the punctures were made about fifteen times, and after each operation about three pints of serum would drain away. The latter part of December erysipelatous inflammation developed about the puncture and extended over it. During the progress of the inflammation, large bullæ would form, the bursting and continued free discharge of which caused an entire disappearance of the œdema of both legs. Relief was not only afforded by these operations to the œdema, but the attacks of asthma notably diminished in frequency and severity. January 8, two weeks after the inflammation of the right leg developed, sloughing took place. The sloughing was confined to the calf of the leg, was deep, and was attended with free *serous* discharge from the ulcers. In a few days a low typhoid state set in; he rapidly lost strength, and on the 7th of February died of exhaustion.

When these notes were taken (January 8,) the remaining features of the case were as follows: He was emaciated and anemic, and his skin was harsh and dry, his countenance anxious; appetite poor; flatulent dyspepsia marked; the bowels constipated; hemorrhoids; tympanitic abdomen; slightly enlarged liver; normal spleen.

At the apices of the lungs diminished expansion; flattening, impaired resonance, and increased fremitus at the left; moist crackling and sub-crepitant rales heard throughout the lungs. Apex beat of heart in sixth interspace one-fourth inch inside of nipple line; veins of right side of neck enlarged. Cardiac impulse moderately strong. At apex a low-pitched systolic murmur; muscular element lessened. At base pulmonary second accentuated. The width of the cardiac area of dullness was increased one-half inch to the left, and was not changed by full inspiration.

Urine contained albumen; amount varying, at times $\frac{2}{3}$, then $\frac{1}{3}$ bulk. Hyaline and numerous granular casts.

Ophthalmoscopic examination.—Small discs. Myopia. O. D. disc dirty gray, veins tortuous. No marked change in the color of the nerve; outlines misty, and is slightly swollen. O. S. disc same, but more marked. No hemorrhage in either eye. Diagnosed incipient neuritis.

Autopsy five hours after death. No rigor mortis; emaciated; commencing ecchymoses. Great fullness of the venous circulation.

Lungs.—Apices bound down by adhesions. Slight right hydrothorax. Base of left lung ant. and post. adherent. At left apex three or four areas of catarrhal pneumonia.

Heart.—Weight 21 ounces; left ventricle wall hypertrophied; mitral valve insufficient, admitting almost three fingers; its cusps thickened; one leaflet of the aortic valve slightly diseased; left cavities increased in size. Aorta atheromatous, a large patch especially one inch from the valves.

Liver enlarged, hard, congested. Kidneys small, congested, capsules adherent, relation of cortical to medullary substance normal.

Microscopical Examination.—Kidney showed decided interstitial nephritis, with fatty degenera-

tion of the tubular epithelium. Liver slightly cirrhotic and fatty. Muscular fibres of the heart slightly undergone fatty degeneration.

Aortic Valve Disease Due to the Combined Action of Strain and Rheumatism.

By J. H. Musser, M. D.

Neither the habits, the hygienic surroundings, nor the social conditions of Mr. C. K., from whom these specimens were removed, had any relation to the cause of his illness. As a laborer in a rolling-mill, his occupation might have had some predisposing influence on the localization of the disease, he being exposed to extremes of heat and obliged to do heavy lifting. The family history did not disclose hereditary disease. Withal in the past twenty years—at this noting he was aged 47—he had had frequent attacks of inflammatory rheumatism; and in 1878—four years previous to this account—he had an unusually severe attack, after which he recognized his present palpitation and indigestion, characterized by pain and vomiting. These symptoms increased in frequency and severity, and were often attended by œdemas of the legs. The last three years he was unable to work. Within the year lost in flesh and strength, and had several attacks of pulmonary congestion.

I abstract the condition on admission to hospital, December 1879, from notes taken as registrar. Slightly emaciated, sallow complexion, anæmic appearance, countenance of suffering, dry skin, cold extremities, ankles œdematous, muscular weakness, tremor on exertion, marked prominence of lower part of chest and bulging of præcordia, sternum pushed forward, lower half especially, giving pouter pigeon appearance. Impulse marked in normal cardiac area, and extending two inches to the left; epigastric pulsation; pulsation of veins of neck; apex beat in sixth interspace one inch outside of nipple line. No hepatic pulsation. A line drawn diagonally from the second right costo-sternal articulation to the fourth rib one inch from nipple line, and then vertically to the hepatic dullness, represents the right border of cardiac dullness. From the top of the third left rib, one inch from the sternum, a uniformly curved line extending to the apex beat, showed the left limit. By joining these lines with horizontal ones, the upper and lower borders are defined.

On auscultation at the aortic orifice, a strong systolic murmur, transmitted to the vessels of the neck, and a rough diastolic murmur, transmitted to the base and along the sternum, is noted. At the xiphoid cartilage, and at the apex systolic murmurs, differing in pitch, are heard, the latter also at the spine of the left scapula. Pulse small, feeble, compressible.

Cough, muco-purulent expectoration, are complained of, and the physical signs of bronchial congestion are observed. The appetite is poor; pyrosis and flatulence distressing; bowels constipated. Urine slightly albuminous; no casts.

Subsequent course.—With calomel and soda, and a liquid diet at first, followed by digitalis and quinia, the venous stases had disappeared, and the cardiac symptoms ameliorated within a month. After exposure to cold, internal venous congestions and œdema had supervened, and in five

days, January 20, 1879, he died of pulmonary congestion.

At the autopsy the lungs, liver, spleen, and kidneys were found characteristic of dilatation of the heart—congested, and with increase of connective tissue in the latter three organs. The heart presented very interesting lesions. It was enormously enlarged, weighing thirty-two ounces. The right heart was dilated; the ventricle wall averaged one-eighth inch in thickness; the tricuspid orifice was insufficient, and admitted four fingers. The left ventricle wall averaged one-half inch in thickness; the mitral valves were slightly thickened, and a few opaque patches were seen. The aortic valves presented a remarkable appearance. Two of them were fused together and were rigid, projecting in the lumen of the orifice—the other valve also assisting in narrowing the calibre of the opening by rigidly jutting outwards. The lumen was scarcely more than a slit. The coronary arteries were not closed, and were found at the bottom of pouches with calcareous walls. On one side the deposited calcareous matter of which the valves were composed, extended under the endocardium to the base of one of the mitral leaflets. Of course, the valves were covered by endothelium.

It is of interest to note that the mitral valves comparatively escaped the inflammatory storms, while the aortic valves were so markedly affected—contrary to the usual rule. It is suggested that a chronic valvulitis, or at least hyperæmia, might have been started by the strains incident to his occupation, and hence the valves readily invited acute inflammatory processes. The present condition being a secondary degenerative result thereof.

Thursday evening, June 28, the President, Dr. Tyson, in the chair.

A Specimen of Renal Calculus—Oxalate of Lime.

By J. H. Musser, M. D.

R. R., æt. 32, a stone-cutter, residing one year in Philadelphia, applied to me for treatment June 5, bringing with him a sample of his urine. It was bloody, and had been passing without pain during the twenty-four hours prior to this visit. Three months ago, without any cause, he was seized with pain in the left loin. The pain increased in severity, kept him from work, caused faintness, but no nausea or vomiting; did not radiate in any direction save transversely to a slight extent; lasted three days, and was not followed by hemorrhage. In the intervening three months he was in good health. A jar of the body or any movement did not increase the pain. It may be noted, but is rather irrelevant, that for ten or more years he has always had a weak back, becoming painful when stooping.

Twelve hours after the consultation the same localized pain recurred, and continued for twenty-four hours. Suddenly it was relieved, and the subsequent urinary discharges were clear. In three days he had a return of the pain and hemorrhage simultaneously. The pain increased in severity, and at the height of the paroxysm extended to the testicle and the head of the penis. The paroxysm was relieved by the passage of the calculus I show you by the urethra. The passage of the stone through the ureter was characterized

by the most agonizing pain, and frequent attempts to urinate. Microscopical examination of the first sample of urine showed the red color due to blood. A similar examination of his clear urine, as well as the bloody, proved the presence of urate of soda and crystals of the phosphates. The urine was acid. The diagnosis of renal calculus was not difficult, but the microscopical appearances of the urine led me to infer that the stone was composed of uric acid. With such idea the patient was put on alkaline treatment. The sequelæ proved that the solvent effect of such treatment was of no avail save from the diuretic action of the drugs. Morphia was given to relieve pain.

A portion only of the stone was received—an angular portion having been broken off by the patient. The portion weighs .06 gram. The exterior is tuberculated; the interior dark in color—bluish; the exterior lamina light brown. It is exceedingly hard. Chemical examination was made by Dr. Leffmann, who reported it to be an oxalate of lime calculus.

Hæmatoma in the Upper Portion of the Mediastinum, Producing Death by Suffocation.

Dr. J. T. Eskridge said that he obtained the specimen from a colored man, porter, aged thirty-two years. He had led an irregular life, but it was not positive that he had ever contracted syphilis. During the past winter he suffered from a severe cold on the chest, and was told by his physician that his heart was inflamed. With the exception of slight cough, unattended by any difficulty in breathing, he had considered himself in excellent health on June 10, 1883, when, after carrying a heavy trunk on his shoulder, from the first to the fourth floor of a hotel, at Cape May, he was seized immediately with great difficulty in breathing, and was compelled to seek the open window to prevent suffocation. During the next two days, while still remaining at the seashore, he suffered from several attacks of shortness of breath, each lasting from several minutes to an hour or more.

He was admitted to the Hospital of the Jefferson Medical College on the evening of June 12, about sixty hours after the occurrence of the accident. On admission his breathing was so labored that he was unable to speak. He was gasping for breath and bathed in profuse cold perspiration. Respiration 36, with greatly prolonged expiration; pulse 100; temperature 99.7°. Inhalations of amyl nitrite, and the hypodermic use of morphia and brandy, seemed to give relief. The attack lasted about twenty-five minutes. He slept well during the night, and was tolerably comfortable until 5 a. m., next day, when he had another paroxysm, which was promptly checked by amyl nitrite, morphia, and dry cups to the chest.

14th, a. m., Dr. Eskridge saw him for the first time. The patient was breathing quietly, and said that he felt comfortable. Pulse and temperature were nearly normal. Urine contained neither albumen nor sugar. No cardiac murmur was detected. Lungs were hyper-resonant at their apices. Loud moist bronchial rales were present throughout both lungs. In view of the man's former freedom from attacks of dyspnoea, he thought that he detected nothing capable of giving rise to so great interference with respira-

tion. The next two days no dyspnoic attack occurred, and he seemed to be doing well.

17th. His breathing was distressing for several hours. Nothing seemed to afford much relief.

18th. Severe asthmatic breathing came on at 6 a. m., and lasted in its worst form about six hours. Chloral hydrate gave some relief. After that paroxysm his breathing did not again become quiet. He died exhausted at 7 p. m. the next day. With the exception of occasional headache, he did not complain of pain at any time.

Section cadaveris was made by Dr. Parrott, the medical resident, the pathologist of the hospital and Dr. E. being absent from the city at the time.

Thorax.—Pericardial sac was completely obliterated by old firm adhesions between the pericardium and heart. The heart was rather soft, and both ventricles were relaxed, and contained considerable dark fluid blood. Valves nearly normal. Both pleurae were adherent to the upper portion of the pericardium, and the left pleura was everywhere adherent to the lung. Both lungs were emphysematous at their apices, and considerable lobular emphysema existed. Bronchial tubes were congested and contained considerable mucus.

A semi-solid, or rather soft oblong body, about two inches long by one and a half wide, was found lying upon the lower anterior surface of the trachea, imbedded in connective tissue, and firmly held by old adhesions. It occupied a position just above and behind the transverse portion of the arch of the thoracic aorta. Three of the rings of the trachea in the position where greatest pressure was exerted by the semi-solid mass presented a dark color, and one of the spaces between the discolored tracheal rings was nearly ulcerated through from the effects of pressure. On cutting into the tumor, it was found to consist of blood more or less clotted. The calibre of the trachea was greatly lessened at the seat of hemorrhage. No ruptured blood-vessels were found. No disease was observed in any of the arteries. Abdominal organs were nearly healthy in appearance.

Dr. Eskridge, in his remarks on the case, said numerous cases of rupture of the aorta, or of smaller blood-vessels, into the trachea, bronchi, oesophagus, or mediastinum, were on record; but in all of them, so far as his knowledge went, death resulted directly from loss of blood. The peculiarity of the case, of which he had given a description, was the formation of a hematoma in the mediastinum. In hemorrhages into that space, the blood usually gravitated to the lower portion of the chest, and the patient soon died from loss of blood. In the case he presented, however, on account of extensive old and firm adhesions of pleura, pericardium, connective tissue, and everything else in the upper portion of the mediastinum, a hemorrhage in that situation must necessarily have been circumscribed, and could have taken place only gradually by dissecting up the adhesions. He thought that the condition of the parts that prevented an extensive hemorrhage predisposed the smaller blood-vessels, especially the veins, of that locality to rupture. In view of the extensive alterations, by means of general adhesions, that had taken place at the seat of hemorrhage, it was not surprising that rupture of a blood-vessel should have occurred, when the parts

in the anterior region of the neck and upper portion of the chest were suddenly put upon the stretch, as occurred in the act of raising a heavy trunk from the floor and placing it upon the shoulder. From the specimen, as he obtained it, he was unable to say whether the hemorrhage had occurred from a rupture of the aorta or one of the smaller vessels, or from the bursting of a very small vessel that had become aneurismal. The tearing across of small veins would have been sufficient to give rise to the extravasated blood.

Congenital Fatty Tumor Beneath the Occipito-Frontal Muscle.

Fatty tumor beneath occipito-frontal muscle, presented by Dr. Nancrede. The tumor was simply presented on account of the rarity of such growths of foetal origin. The patient was a child aged 16 months. The growth was noticed at three weeks, and in consequence must have been of foetal origin, as it then was of the size of a bean. It presented none of the symptoms of a fatty tumor except a faint lobulation, the skin moving freely over it, and presenting none of the dimpling so common in lipomata. Its site was peculiar for a dermoid cyst, viz, over the right occipito-parietal region, yet its resemblance was so close that by exclusion it was considered to be a congenital cyst. Upon removal, it was seen to be distinctly beneath the aponeurosis of the occipito-frontal muscle. Microscopic sections, kindly made with the freezing microtome, by Dr. N. G. MacConnell, showed that the growth was a pure lipoma.

Adenomatous Growth Apparently Recurrent; in Reality an Outlying Portion of the Mamma not Removed at a Previous Operation.

Presented by Dr. Nancrede.

The above title really gives the essential points in the history of a patient aged 23 years, upon whom two operations had been performed for a supposed fibroma (adeno-fibroma) of the breast, which recurring after partial removal of the breast, the whole organ it was supposed had then been removed by another surgeon. Dr. Nancrede had opposed all operation at first, considering the breast was not really the seat of anything beyond a local induration after injury. He had removed the third growth, which, from its history and microscopic appearance, he was satisfied was the result of the irritating drag of the badly-placed cicatrix on a small portion of the breast tissue left at the second operation. The clinical lesson taught by this case was clear, viz., the freest removal of mammary growths.

Tumor of the Sciatic Nerve.

Presented by Dr. G. De Schweinitz.

The following case occurred in the hospital practice of Prof. John Ashhurst, jr., and it is by his permission that I exhibit the specimen. The patient from whom this tumor was taken is at present an inmate of the University Hospital, and gives the following history:

On June 16, 1864, owing to a gunshot wound of the right thigh, he sustained an amputation of that member at the junction of the middle with its lower third. The flaps sloughed, and a few weeks later a re-amputation became necessary. This stump healed, but was somewhat conical in shape, and never, from the very beginning, com-

fortable; being subject to frequent attacks of severe neuralgic pain. Within a year from the date of the amputation, a small lump, tender to the touch, was noted, situated posteriorly and a little to the outer side of the stump. The pains now became more severe and more frequent, and were of a "jumping" character, to use the patient's own language. The tumor increased slowly in size until three years ago, when its growth became more rapid, and at the same time the painful nature of the affection more pronounced, until lately the suffering was well-nigh unbearable. Finally the growth assumed the size which you see it now presents, and on the 12th of last month Dr. Ashhurst removed it, since which time the patient has been free from all pain, except such which naturally accompanied the healing of his wound.

The growth is an irregularly-shaped mass, about as large as a small hen's-egg, having an external envelope of adipose tissue, loosely held together by connective tissue. On section the interior is seen to be a somewhat elastic, rather dense-looking growth, of whitish color, over which pass a few yellowish fibres, probably strands of the sciatic nerve. Microscopic examination of the true

tumor mass shows an entire absence of any nervous elements, a section exhibiting fat cells, fibrous tissue, some spindle cells, and numerous free nuclei near the enlarged and dilated blood-vessels.

The tumor would, of course, be classed clinically as a neuroma, following amputation, while in truth its pathological nature is that of a fibroma. It is interesting that a growth causing so much pain should be without any demonstrable nervous endowment; and surgically it is further worthy of note, because its removal was attended with immediate and probably permanent relief to the patient, a desired result which is by no means always obtained by the excision of these growths.

Dr. Saurison, by invitation, made some remarks upon the bacillus tuberculosis, and exhibited a number of specimens. He said that he did not employ nitric acid in preparing his specimens, as it seemed in many cases to bleach out all the bacilli from the tissues, but formic acid in the proportion, acid. formic. 1 pint, alcohol 2 pints. It was a curious fact that the bacilli occurred in patches, while in other parts, apparently equally diseased, they were present in small numbers.

C. B. NANCREDE, *Recorder.*

EDITORIAL DEPARTMENT.

PERISCOPE.

A Simple Operation for Facial Neuralgia.

Dr. J. F. Henstis thus writes in the *Med. News*, December 8, 1883:

A. E. L., an old gentleman, past seventy, of fine constitution and very healthy in every respect, except being a sufferer from tic-douloureux, has consulted me several times in the last year for his complaint, and has taken the various remedies likely to benefit him, with very little relief. As he continued to suffer more and more, I advised him to let me operate on him as the only means of relief. But the neuralgia being general, affecting the branches of both the supra- and infra-orbital nerves, I could not promise him with entire confidence that an operation on the infra-orbital nerve would be sufficient, although that seemed to be most affected. The pains would dart all over the side of the head and face at the least touch, even of a hair of the head or beard, or from the impression of a breath of air, or even from the movement of the jaws in mastication. His suffering became so great and constant, and the neuralgic attacks so severe from attempts to eat, that he began to run down from sheer exhaustion from want of food and pain.

He was so weak at the time of operation, that it was a very important matter at his advanced age to make the operation as simple as possible, consistently with the hope of permanent relief. Therefore, discarding Carnochan's operation of trephining the antrum and following up the nerve beneath the orbit, and removing it; and Langen-

beck's slighter one, of dividing the nerve far back in the orbit with a tenotome, and drawing it out through the infra-orbital foramen, I merely cut down upon the infra-orbital foramen, and with a fine steel drill, such as dentists use, improvised of piano wire, drilled out the nerve in its entire length, as far back as the speno-maxillary fissure. The immediate effect of the operation was to abolish all sensation in the previously sensitive parts, and to enable him to use his jaws without suffering the darting pains he formerly had. And not only was the sensitiveness of the face relieved, but also that of the side of the head, showing that the trouble was in the distribution of the infra-orbital nerve, and that the affection of the branches of the supra-orbital was a reflex one. Barring some swelling of the face, he had no trouble afterwards. The wound soon healed, and he has been able to expose himself to the air, and eat with impunity, and now, although nearly two months have elapsed, he remains free from pain and is enjoying excellent health.

A Little-Known Cause of Deafness.

The *London Med. Record*, November 15, 1883, tells us that Dr. A. Ducan (*Rev. Mens. de Laryngologie*, etc., December 1883), has found a slit-like narrowing of the cartilaginous meatus very common amongst women of the lower classes, at about the menopause. He considers it caused by the fashion of wearing a handkerchief tied round the head, often with a band of hair lying between it and the ear. In nuns, the ears are also bound down by their headress. The result of the

pressure is that the auricle is gradually flattened against the head, and the tragus applied to the meatus like a lid. This has the effect both of retaining the secretion in the meatus, and of preventing the entrance of waves of sound.

A Scrotal Compressor.

Dr. G. Miliario describes the following instrument in the *Med. Record*.

Believing that support and pressure are the main factors upon which we are to rely for controlling and removing the effects of increased vascularity in scrotal diseases, I devised, many years ago, an apparatus having such ends in view. Its favorable reception by my professional brethren impresses me with the fact that the principle upon which its construction is founded is sound. Since its first introduction to the medical public, some improvements in construction have been made which I believe will increase its usefulness and extend its range of adaptability.

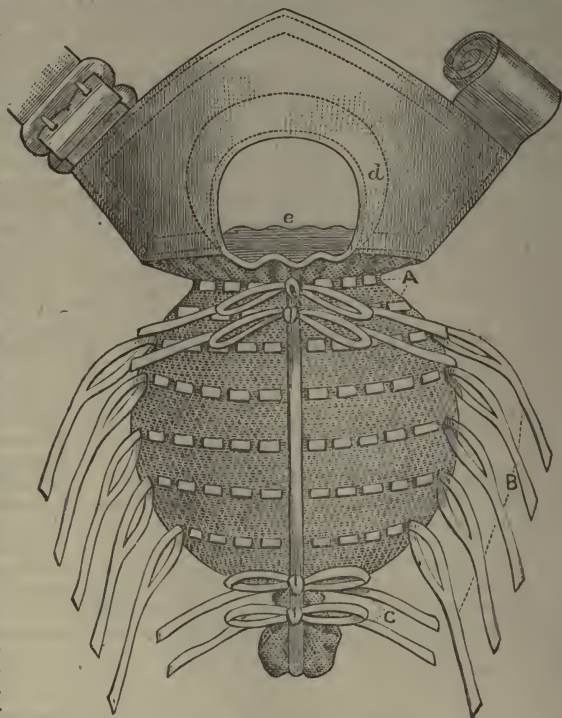
It is perhaps best to describe the perfected apparatus as it now is, and its mode of application, in order to come directly to the purpose of the present communication. The cut herewith represented gives a better idea of its construction than can be done by mere words. It is, in brief, a netted silk pouch for the scrotal organs, which can be compressed in any portion at will by shoving the encircling tapes in its meshes, and suspending the whole by means of bands to the waist. The penis is received in the circular opening in front, which opening can be enlarged in any direction for forced displacement of the organ without weakening the fabric. The posterior and upper edge of the pouch is provided with a cushion to modify pressure beyond the scrotum and against the perineum.

The first step in applying the apparatus is to secure for it close apposition to the scrotal organs. This is begun by taking the two ends of the upper lacings on either side (marked A), and by pulling uniformly on each the diameter of the upper part of the appliance is contracted and closed around the spermatic cord, above the testes, so as to prevent the latter escaping. The bandage being shirred snugly, is held in position by tying the lacings in bow knot under the penis. The next step is to similarly shirr and tie the lowest set of lacings, which closes and shortens the bandage below the testicle (marked C). This produces counter-action, and compression against the upper set of lacings, care being taken to exclude any fold of the scrotum.

The next lacings above the lowest set (marked B), which encircle the middle of the scrotal organs, should be shirred *only* snugly enough to be comfortable. In a few hours, according to the nature of the disease (as in the reduction of varicocele) the compression acts upon the absorbents, and the enlargement of the scrotal organs begins to abate. As this reduction of the scrotal contents progresses, the sets of lacings (marked A

and B) are to be tightened in order to maintain equable compression.

It is well known that in cases of epididymitis the disease must be arrested at once, or the epididymis will become indurated and closed, while the excretory duct of the testicle loses its function; in other large swellings, where rapid reduction is necessary to effect a cure, a bandage of large size containing more lacings becomes indispensable. In such cases the same rules for applying and shortening the bandage as above stated will be followed. They are manufactured of silk, linen, and cotton fabrics, mixed, and for ordinary purposes are made in three sizes, No. 1 being the smallest, No. 2 medium, and No. 3 the largest.



Nettle Rash.

We take the following practical points from an address on this subject by Dr. McCall Anderson in the *Brit. Med. Jour.*, December 8, 1883:

Diagnosis.—When the eruption appears in its typical form—in the shape of wheals which are pale in the centre and red at the edges—it cannot be mistaken for any other; and when it is due to the sting of an insect, the dark point in the centre of each wheal is characteristic; but when it assumes one of the less usual forms, the lesion being erythematous or papular (*Lichen urticatus*), or tubercular (*U. nodosa*), mistakes may sometimes arise, if due care be not taken. Such errors may, however, be generally avoided by noting the presence of the four following points, which almost invariably characterize the members of the urticaria group:

1. The rapidity with which the eruption makes its appearance.

2. The itching, burning, or stinging sensation to which it gives rise.

3. Its short duration, although the disease may be kept up indefinitely, owing to the occurrence of successive crops.

4. Its not being followed by desquamation.

Treatment.—The first point in the management of any case of urticaria is to endeavor to find out, and, if possible, to remove the cause or causes.

In acute cases, the eruption generally subsides within two or three days, when no treatment is adopted; but generally a sharp purge is of use, especially when, as in the majority of instances, the eating of some indigestible food, or digestive derangement, is at the root of the mischief; and, if we have reason to believe that such food is still in the stomach, as indicated by nausea, etc., an emetic of mustard, ipecacuanha, or sulphate of zinc, may be administered at the outset. In all such cases, stimulating food and drink should be avoided, and the diet should be of the simplest kind.

In chronic cases, a similar line of treatment should be pursued under similar circumstances, and, where we have reason to suspect that it results from the digestion being disturbed by some particular kind of food, the nature of which varies in different persons, owing to their peculiar idiosyncrasy, we may with advantage follow the advice of Willan, who wrote, "I have desired several persons, affected with chronic urticaria, to omit first one, then another article of food or drink, and have thus been frequently able to trace the cause of the symptoms. This appeared to be different in different persons. In some it was malt liquor; in others spirit, or spirit and water; in some, white wine; in others, vinegar; in some, fruit; in others, sugar; in some, fish; in others, unprepared vegetables." Like most other observers, however, he found that, in some cases, a complete alteration of the diet was not of the least avail. It would be quite out of place to refer to the means to be taken for the removal of the many other causes of this affection, as these must be treated upon general principles, and in the same way as we should do if they were independent of urticaria.

When no cause can be made out, or where the supposed cause has been removed, and the eruption continues to crop up, we must treat it empirically. We may, for example, try the effect, as Trousseau suggested, of the administration of sulphuric ether in doses of twenty to forty drops in water, or of quinine in full doses, or of arsenic, which is only exceptionally useful. But the medicines from which, perhaps, most is to be expected, are atropia and bromide of potassium; the former may be administered subcutaneously at night, or night and morning, the initial dose for an adult being $\frac{1}{16}$ of a grain (*e. g.* 5 minims of a solution of one grain of sulphate of atropia in 500 of water); the latter in doses of ten grains dissolved in water three times a day. In either case the dose should be gradually increased, either until the disease begins to yield, or until the superposition of the usual physiological effects renders it unsafe to push the experiment further. Occasionally, good results are obtained from the continuous current of electricity for ten minutes night and morning, one sponge (the positive pole) being

applied to the top, and the other to the bottom of the spine.

In obstinate cases, a complete change of air and scene and occupation is desirable.

Local treatment is generally resorted to, more with the view of alleviating the distress of the patient than in the hope that it will cut short the disease. The parts, for example, may be sponged with vinegar and water, or with eau de Cologne, or with a lotion of carbolic acid. An ointment containing chloroform or a mixture of chloral and camphor may sometimes be of service, and in exceptional cases not only temporary relief, but permanent benefit may result from the use of the tarry preparations, such as a lotion composed of equal parts of tar, soft soap, and rectified spirit.

A Method of Opening Psoas Abscesses.

Dr. T. F. Chavasse recommends the following in the *Lancet*, December 29, 1883:

The abscess was opened in the following manner: An incision was made immediately above the crest of the ilium, commencing at the edge of the erector spinæ muscle, and carried transversely outwards for four inches towards the anterior superior spine. Having divided its various structures as in colotomy, the anterior edge of the quadratus lumborum muscle was reached. The forefinger was then passed downwards and forwards on the iliacus until the tense and distended psoas sheath was detected. A scalpel introduced by the side of the finger incised the abscess sac, and the opening was subsequently enlarged by the introduction of a pair of dressing-forceps. This proceeding gave exit to a pint and a half of pus. Still keeping the forefinger in the wound, two large drainage-tubes were introduced into the abscess cavity, and left there.

Dr. C. says:

"You will naturally ask, Why open psoas abscesses pointing in the thigh above the iliac crest? The following are the advantages claimed for the procedure I have practiced in these two cases:

"1. The abscess is tapped, and the pus escapes at the most dependent point it is possible to obtain, and, as the patient lies on his back, the cavity drains itself without trouble or difficulty.

"2. When a sinus is thoroughly established, the drainage-tubes may be omitted at an early date, and any accumulation is unlikely to take place.

"3. The drain-hole is very near the diseased bone, so that the three or four inches of abscess cavity below this point becomes obliterated almost immediately after the operation. Hence a diminution of secreting surface.

"4. The pus escapes from an orifice removed from the genital organs, and the chance of the wound becoming septic is lessened.

"5. The antiseptic dressings can be applied and retained in position more readily than if the drain opening is in the thigh. Moreover, the pus will not so easily reach the edge of the dressing, and consequently it will not be necessary to make changes so frequently.

"6. From its situation, the patient is less likely to interfere with the dressing than if it be applied anteriorly.

"The disadvantages of making the incision in the position indicated are that the operation is slightly more difficult, some muscular fibres are severed, and there will be a little more bleeding than if the abscess be opened where it points on the inner side of the thigh; but all of these objections are trifling as compared with the satisfactory drainage. Even if the pus has burrowed beyond the thigh, and has reached the knee or a lower point in the extremity, the incision should still, in the first instance, be made in the back, and the abscess tapped there. Subsequently an opening may also be made where the pus is pointing, to allow the escape of the fluid accumulated below the principal draining orifice; this secondary incision will soon heal. The next best position to open a psoas abscess for antiseptic purposes is above Poupart's ligament, by means of an incision, as though about to ligature the external iliac artery. Having reached the transversalis fascia, by pressure below the pus can be made to bulge, or, failing this being accomplished satisfactorily, an opening large enough to admit a probe may be made in the thigh where the abscess is presenting, which when passed up under Poupart's ligament will indicate the whereabouts for the free incision in the deep textures. After the tubes have been inserted the orifice in the thigh closes. The drainage of the abscess in this position is not so good as by the other method; the opening not being so dependent, the tubes must be retained for a longer time, and more difficulty is experienced in getting a free escape of the pus. In one instance in which I operated by this plan upon a woman with a psoas abscess, the result of disease of the sacro-iliac synchondrosis, the fingers of the patient would wander under the dressings in spite of all protestations and threats, and the result was a septic condition of the wound, and eventually death."

The Single is Immediate Suture of a Lacerated Perineum.

Dr. T. Johnson Alloway, contributes a lengthy article with this title to the *Am. Jour. of Obstetrics*, January, 1884, which thus concludes as follows:

1. Examine carefully, with your eyes, every perineum after removal of placenta. If lacerated to more than a quarter of an inch, apply the suture.

2. Use one of Emmet's long, straight perineum needles, with a silk suture. By the aid of a holder, force the needle through the skin on the left side of the tear, half an inch from its edge, at any point between the beginning and end of tear, but the nearer to the beginning, that is, the higher up, the better will be the result. Now, with the two fingers of left hand in the rectum, press up the rectal wall and recto-vaginal cellular tissue, so that the needle can be rapidly, though steadily, made to glide beneath this tissue and over the rectum, hugging the latter as closely as possible, to make its exit at a corresponding point on the opposite, or right side. In tying the suture, avoid doing so too tight, as it is a good plan to allow for swelling, which generally lasts for some days.

3. Be sure that the needle in no part of its course makes an exit in the vaginal surface; if so, you will probably have a pus pocket.

4. The operation is very simple, and can be performed by any physician of ordinary experience.

5. The after-treatment consists in washing out the vaginal passage night and morning with any antiseptic solution the physician is accustomed to use. *But he must do it himself*; the nurse would be as likely to pass the tube below as above the suture, and kill all your joy. As regards antiseptics, I use in such cases a solution of corrosive sublimate $\frac{1}{2000}$ once in twenty-four hours, administered at night. I find this solution as handy and harmless as carbolic acid. Tell your chemist to make a 3ij. alcoholic solution of hyd. bichl., each drachm of the solution to contain seven and one-half grains of the salt. One teaspoonful of this mixture added to a pint of water will give, almost to a fraction, one part in one thousand. I have used this solution in cases of metria three times in the twelve hours for two consecutive days without any evidence of toxic effects from absorption. It is probably due to the formation of an insoluble albuminate of mercury, which seals up all breaks in the surface for a time.

6. The suture had better be allowed to remain in situ for nine or ten days. I am strongly in favor of the silk; the wire suture is liable to produce a bleeding point or two on removing it. This accident might prove troublesome from absorption, which is so active at this period of convalescence.

7. The nurse is the only assistant you will require, and is, of course, in your confidence.

Brain Exhaustion.

Dr. J. Leonard Corning discusses this subject in the *N. Y. Med. Jour.*, December 29, 1883, and enunciates as his principles of treatment, first, cerebral rest; second, increased general and cerebral nutrition; third, elimination of psychical irritation; and he thus carries them out:

The subject is secluded in a darkened room from ten to fifteen hours at a time, according to the amount of sleep which it is desired shall be had during the twenty-four hours. The amount of sleep is progressively increased by habit, moderate medication, and hydro-therapy, and no attempt is made to produce a sudden state of stupor by the reckless use of sedatives. When the patient awakes, as is usually the case, two or even three times during the hours set apart for rest, nourishment is administered, but always in a fluid and easily-digested form. Where difficulty is experienced in again falling asleep, resort is had in the beginning to limited medication. The few hours of wakefulness are devoted exclusively to some form of amusement—reading, writing, and even the mildest forms of mental concentration being absolutely prohibited. This, in brief, is the method from which I have already seen most happy results, and from the employment of which I hope and believe much good will in future be derived. It is hardly necessary to say that the problem of cerebral rest is essentially different, and presents many more difficulties than spinal rest. To give repose to the motor cells of the cord is comparatively an easy problem, and one which only exacts a permanent fixation of the motor apparatus for its solution, the consciousness or unconsciousness of the individual being only a matter of secondary importance. Rest,

however, for those cells, the function of which is the evolution of mind can only be obtained by a prolonged period of absolute unconsciousness; and this, as a matter of course, will often tax the patience and resources of the physician to the utmost. Perseverance and the utilization of the principle of habit will usually, however, render essential assistance.

Syphilis and Blindness.

We read as follows in the *Journal of Cutaneous and Venereal Diseases*, December, 1883:

Syphilis determines grave ocular lesions. It may produce blindness; it is a frequent cause of loss of vision; and this at any age—in infancy as well as in adult life.

All the membranes of the eye may be attacked with specific lesions, leading to destruction of the organ.

Most often the lesions are multiple; they rarely remain localized in a single membrane.

The ocular lesions of syphilis are most often indolent, and originate sometimes without the knowledge of the patient. Exception is made of iritis.

In the majority of cases, it is papillary atrophy which occasions the loss of vision.

Ataxia frequently shows itself in the syphilitic blind. Mixed specific treatment has considerable influence upon the ocular lesions of syphilis; a cure is quite frequent.—*Edward Binet, Th. de Paris, 1883.*

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—In a reprint from the *Alienist and Neurologist*, Dr. Talbot Jones gives a sketch of some recent acquisitions in nervous pathology. As a point of general interest, we quote what he says of syphilitic and of ordinary atheroma:

The distinctions between syphilitic endarteritis and atheroma are these: In the latter the caliber of the vessel is seldom diminished; in the former the lumen is lessened to a degree that may cause stenosis; in the latter only a few vessels are involved, in the former a large number; in the latter calcification may ensue, never observed in the former; and finally, the latter is incurable, which is not always true of the former.

—Hysteria has always been a mysterious disease, and in a study of it from the psychological point of view, by Dr. James H. Lloyd (reprint from the *Journal of Nervous and Mental Disease*), many curious facts are stated, and a moderately successful effort made to give them a consistent explanation. Bain and Maudsley are his chief authors.

—"The Esculapian" is a new medical journal published monthly in New York City by

Birmingham & Co. Its first number presents an attractive appearance.

BOOK NOTICES.

Fat and Blood. An Essay on the Treatment of Certain Forms of Neurasthenia and Hysteria.

By S. Weir Mitchell, M. D., etc. Third edition, revised, with additions. Philadelphia: J. B. Lippincott & Co. 1884, clo., pp. 164. Price, \$1.50.

The combination and systematic application of rest, massage, electricity, dietetics, and therapeutics, in cases dependent upon exhaustion or irregular action of the nerve centres, are set forth in this volume with commendable clearness and brevity. There is matter here which in many hands would have filled five hundred pages, but which in none could have been set forth with better effect than it now is.

The plan of treatment has been under trial for a number of years, and has succeeded in various instances in which no alleviation had been derived from the ordinary resources of our art. It can never become in extensive use, because it demands special surroundings, specially trained assistants—more than all, special traits and aptitudes in the physician himself—which must confine the scope of its usefulness very materially. Given these exceptional conditions, and its results are very surprising, as any one will see who reads the cases recorded in this volume.

With reference to this third edition, we should add that it has been largely rewritten, and a number of new points added.

Elements of Human Physiology. By Henry Power, M. B., F. R. C. S., etc., Philadelphia. H. C. Lea's Son & Co. 12mo., pp. 387.

This is another of the "Manuals for Students of Medicine," of the series of which we have heretofore spoken favorably. A rather close examination of this volume confirms us in the opinion that the series is an excellent one, and that this volume is not at all below the level of the others. It is neatly illustrated, the facts are presented lucidly, and the writer is thoroughly acquainted with his subject.

—Johns Hopkins University has provided itself with a new gymnasium, which was lately opened to the students and the public by cards of admission. The promotion of physical culture will be a part of the regular collegiate course. Dr. E. Mussey Hartwell, who is in charge of this department, delivered an address on Physical Training in Colleges and Universities.

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WOMEN IN MEDICINE.

While our County Society seems determined to exclude women from membership, and the profession at large is not over ready to extend the hand of professional friendship to them, we must, as fair-minded men, say, "Give them a chance."

There is, no doubt, considerable force in the argument that a woman is not physically capable of enduring the anxieties and the privations and the worriment incident to the life of a physician; but even if this be true, does that accord us the right to deny them admittance to the profession? Do we inquire into the physical characteristics of any male who desires to matriculate at our colleges? and should we do so with any more reason because a being wears petticoats?

We thoroughly realize the force of all the arguments that have been adduced against "women in medicine," but we cannot see that they afford ground either for refusing them admittance, or for offering them insults when they decide to join our ranks.

If a woman wants to drive a street-car or to run a locomotive or to engage in business, we say, "All right; go ahead; if you are capable, you will succeed." Why then should we not afford them the same opportunity in medicine, if they so desire?

We need not be particularly intimate with them if we so elect; but we have no right, as gentlemen, to openly insult them, as has been repeatedly done by thoughtless young students in the lecture-rooms of some of our hospitals, where these women students resort for clinical teaching.

Recently, at the Philadelphia Hospital, in this city, some thoughtless young fellows were amusing themselves at the expense of the female students in attendance, when Miss A. M. Fielde, one of their number—one of the most widely-known and eminent missionaries in China—arose on the inspiration of the moment, and amidst instant and most respectful silence, spoke as follows: "Gentlemen: I have been for eighteen years a missionary in China. The Chinese have no medical science, and superstitious rites are chiefly relied on in the treatment of disease. All the

people are in need of medical aid, but the *women* are the *neediest*. A Chinese woman would under no circumstances go to a male physician for the treatment of any disease peculiar to her sex. She would be prevented by her own womanly delicacy, and by all the notions of modesty held by those around her. She would suffer life-long agony rather than violate her sense of propriety. Her father, her brothers, and her husband, would even let her die, rather than allow her to be treated by a male physician. Full of sorrow for the sufferings of these women, I have been looking in Christian America to see what hope of help for them might be here. I have been glad to find that in some of our great medical schools earnest and self-sacrificing women are fitting themselves for a work of mercy in Asia and other lands. Unless such women learn to do such work well, there is no physical salvation for those afflicted ones. And in behalf of those women, who have no medical care while they so sorely need it, I ask from you the courtesy of gentlemen toward ladies who are studying medicine in Philadelphia." The whole class at once applauded, and a gentlemanly young student arose and informed the ladies that hereafter they would not be molested. We say again, if women want to study medicine, we have no right to say nay, and it is our duty, as gentlemen, to discountenance anything that may seem like offering an insult to a woman.

A POPULAR KNOWLEDGE OF PHYSIOLOGY.

From time to time the question has been discussed whether it is well that the public should be instructed in physiology, and both sides of the subject have been maintained with much force and logic. It is a problem possessed of more than passing interest, for on the side of those who argue in the affirmative there are many strong points.

The practical value of hygiene to the masses is really based upon an acquaintance with physiology by the masses.

If the public do not know what nature intends their various organs to do, how can we expect the

public to know how to so treat these organs that they can do what they are destined for?

The age of blind faith has gone by; and the inquiring mind of man wants to know why he should be directed to do so and so.

If we tell him that certain acts are detrimental to health, he wants to know why! and when we answer that they will derange the functions of certain organs, he wants to be informed as to the nature of these functions.

It is true that a knowledge of the disastrous results of improper living does not, oftentimes, deter human nature from these errors, as the reckless lives of so many physicians so amply testify; yet with a knowledge of physiology they are prepared, of their own free will, to accept the consequences of their wrong-doings, and cannot plead "ignorance of the law."

A knowledge of the physiology of the sexual organs would prevent many a young girl from receiving a shock to her nervous system at the unexpected and startling flow of blood at the commencement of her menstrual life, that no doubt sometimes is the starting-point of some serious and perhaps irremediable nervous disease.

It is true that physiology is taught in some schools; but it seems to us that it should form a very important portion of the education of every boy and girl.

There is no necessity of going into the little details of what might be called minute physiology, but the gross or general physiology of our various organs and parts, the why each organ exists, and the purpose it ought to serve in the economy of life, are surely subjects with which every human being ought to have some considerable familiarity.

Such knowledge need not and would not redound to the detriment of the physician; on the contrary, we imagine that it would augment his practice; for did the people but know how insidious are the beginnings of disease (and this they would know, if they were familiar with physiology), they would much more eagerly and more frequently consult the physician, and would be much less apt to trust to the blind and unreasoning faith in the quack medicines, so prevalent

now, principally on account of the mystery that surrounds everything pertaining to the science of medicine. Remove this mystery, let the public understand more about the approach and march of disease, and the rational methods of cure, and some of the millions that annually flow towards the patient medicine venders, will find their way to the reputable and honorable physician.

NITRO-GLYCERINE AND THE CHLORIDE OF GOLD AND SODIUM IN ALBUMINURIA.

The paper recently read before the Philadelphia County Medical Society by Professor Roberts Bartholow is well worthy of the widest publicity, for it constitutes one of the most important additions to our therapeutic resources that we have noted for many a long day.

Our weapons have hitherto been very inefficient in the warfare with this condition; and should these drugs prove to possess the powers that this distinguished author attributes to them, we will have, indeed, cause to be very much pleased.

He would use nitro-glycerine, in doses of one minim of a centesimal solution (one minim of the pure drug to 100 minims of alcohol), every three or four hours, in acute cases immediately after the subsidence of the acute symptoms, and in chronic cases at all periods. Chloride of gold and sodium is indicated in the sub-acute and chronic cases, especially the latter. The earlier it is given the better, if structural changes are to be prevented or arrested. The good effects to be expected from it will depend necessarily on the extent of the damage already inflicted on the kidneys.

The usual dose is one-twentieth grain, twice a day, but this may be much increased, if necessary. At the outset, one-tenth grain may be given; in a week the dose should be lowered to one-fifteenth grain, and after a month the regular dose of one-twentieth grain should be steadily pursued, with occasional intermissions. Indigestion, gastralgia, and colic pains, nausea or diarrhoea, are occasionally caused by it; and, if so, the quantity administered must be reduced. It is usually borne without any discomfort, but after

prolonged administration, salivation, weakness, emaciation, trembling, and other nervous phenomena may occur possibly.

This valuable paper will be published in full in our pages.

THE DRAINAGE OF BOSTON.

The city of Boston has made a most marked sanitary advance in the method of disposing of its refuse.

The system consists essentially in an intercepting sewer, which receives all the waste from the various sewers of the city, by which it is carried to a point at which large pumping engines are located; with their aid the accumulation of sewage is artificially propelled, and by the aid of a system of dams, so to speak, it is discharged into the sea at ebb-tide. Practically this plan works very well in Boston, but it is only adapted to sea-side cities. It transpires that before the flood-tide sets in the sewage is miles out at sea. But this system seems very wasteful. When we remember that the sewage that is emptied into the Thames from one output alone, is sufficient to make annually 650,000 tons of manure, it seems a pity that this enormous mass of valuable material should be lost to the soil.

Again, it may transpire that, in time, the water of Boston harbor may become so contaminated by this constant enormous outflow of waste, that the fish therein may be rendered unfit for food, and since they *will* be caught and eaten, they may prove a fruitful source of disease. The method in vogue is, no doubt, the very best in use in any of our large cities, and the sanitary spirit of the people of the "Hub," that made its accomplishment possible, is most commendable and worthy of imitation; but the query arises, whether any system of drainage that does not restore human refuse to the soil from which it came, will not be ultimately found more or less faulty.

—The *Sanitarian*, after a year's experience as a weekly publication, announces its return to its old form as a monthly, but enlarged to ninety-six pages, and with improved type.

NOTES AND COMMENTS.

Resection in Fracture.

Dr. James Patton (*Glasgow Med. Jour.*, January, 1884) highly lauds excision, under antiseptic precautions, in the treatment of compound fractures, and after relating the histories of three cases, he thus concludes: "If there be any class of cases which has been brought forward over and over again to prove the value of aseptic surgery, it has been that of compound fractures. The above cases show to what extent aseptic surgical interference with bony structures may be made, and productive of the happiest results; and it seems to me that resection has not yet attained that general consideration in the treatment of severe compound fractures, and even of some rare forms of simple fractures, which ought to be given to it. Many limbs might be saved in this way, which otherwise would be amputated. Of course there is bound to be shortening of the limb, but not more than the use of a high-heeled boot will make good. There is one thing which I have found of enormous advantage in the treatment of severe compound fractures, and that is the moulding of an iron bar to the contour of the limb, of sufficient strength not to yield when the wound is being dressed.

"I have given these cases, not for the purpose of lauding the aseptic treatment of fractures (as it is now too late in the day to do so), but more for the purpose of showing what beneficial results may be obtained from resections conducted on aseptic principles."

A Spindle-Cell Sarcoma of the Rectum.

The Philadelphia correspondent of the *Boston M. and S. Jour.* writes that Dr. R. J. Levis recently operated upon an unusual case at the Pennsylvania Hospital. A man, forty-three years of age, gave a history of difficulty in defecation, in its origin dating back some three years. Of late he had been obliged to resort to purgatives and enemata in order to secure evacuation. Hardened feces were sometimes the cause of some bleeding from the rectum. Two years ago he suffered with an inflammatory trouble in the perineal region, and with retention of urine. One year ago he detected a small tumor within the rectum by the introduction of his finger to relieve the tenesmus. It was then the size of a walnut. This tumor, when he came under observation, had attained the size of a fetal head. By an effort, the mass could be made to appear outside the sphincter ani. Upon examination the growth

was found to be beneath the mucous membrane of the bowel, having its origin in the submucous structures of the bowel to which it was attached, or in the connective tissue. Dr. Levis grasped the tumor with strong hooks, and pulled it downward, and easily enucleated it. After removal it was found to be rather dense and elastic; it was nearly three inches in diameter, and weighed twenty-four ounces. It was pronounced a spindle-celled sarcoma upon microscopic examination, making it one of the rarest growths in this situation.

Quebracho in Dyspnoea.

Professor Da Costa has had some very satisfactory results from the treatment of dyspnoea by quebracho. In a recent lecture he said that in his experience it had been especially serviceable in two classes of cases: (1) in purely nervous asthma he had found it to be invaluable; (2) in cases which have been rather loosely called cardiac asthma, cases in which a heart lesion has produced failure of cardiac contraction and consequent congestion of the lungs, he had also known it to be very useful. It may serve as a cardiac tonic, or may do good solely by its action upon the respiratory centre in the medulla. Whatever may be the explanation, however, it gives wonderful relief in appropriate cases. The way in which he gives it is the fluid extract in doses of twenty minims every hour, gradually increasing the amount, some patients requiring as much as a drachm before relief is obtained. The good effects are observed usually after two or three doses have been taken. The taste is well covered by using equal quantities of the French syrup of red orange and water as the vehicle. In this form it usually agrees with the stomach. As the respiratory symptoms are relieved, the remedy may be given at longer intervals.

Treatment of Mammary Cancer.

The *Boston Med. and Surg. Jour.*, December 27, 1883, tells us that Küster, in a paper read before the Twelfth Congress of the German Surgical Society, advocates the careful dissection and removal of the contents of the axilla in every operation for cancer of the mamma.

This recommendation, which is not new, gains weight from his report of the careful microscopic examination of the glands in a number of cases where they were seemingly unaffected, and in which, nevertheless, a commencing cancerous change was found in them.

To show the effect of his thorough operation in preventing recurrence, Küster states that, of sixty

women whom he had thus operated upon prior to three years ago, thirteen, or 21.66 per cent., remain well.

Gussenbauer, Langenbeck, and Esmarch spoke in favor of this thorough operation, and Esmarch even declared that when the glands were intimately adherent to the vessels and nerves, and yet there was no appearance of the disease in other parts, he was in favor of disarticulating the arm to permit of thorough removal; and he stated that the only case in which he had done this recovered, and has never had a return of the disease.

The Word "Malaria."

A physician in Tennessee writes us: "Is it not time that our profession should drop from its vocabulary the word *malaria*? Its proper meaning is simply *bad air*, and it fails to express the modern idea of the diseases attributed to it."

It is quite true that the word by its etymology means simply "bad air;" but a great many words—the vast majority, in fact—mean in modern usage something very different from their primitive signification. It is of no moment, for example, that *lunacy* means literally *moon-struck*, that *hysteria* means an affection of the womb, that *scrofula* means *sow's evil*, and the like. If the term has a current modern signification, clearly defined and understood among scientific men, that is all we should ask. "*Malaria*" means that subtle substance which pervades the atmosphere of certain localities, giving rise to diseases characterized by remittance or intermittence of symptoms. Whether this is an animal germ, a vegetable spore, or a chemical poison, has not yet been conclusively shown. Until we can get at the facts, this word will answer as well as another to conceal our ignorance.

Exophthalmos with Loss of Sight and Aortic Insufficiency Benefited by Iodide of Potassium.

To the Clinical Society of Maryland (*Maryland Med. Jour.*, December 29, 1883), Dr. Bermann related a case of a colored woman, *æt.* 50, who has lately lost the sight in her right eye, within the space of two days. There is occasional pain in the eye, and it protrudes very much. Ophthalmoscopic examination throws but little light on the case; there is some venous congestion of the disk, the outlines of which are a little dim. Auscultation of the chest reveals a decided insufficiency of the aortic valve, and consequent hypertrophy of the left ventricle. There is also pulsation in the neck. There is no evidence of syphilis, and the

patent denies it; but there being no clue to the nature of the case, she was put upon iodide of potassium, gr. viij, three times a day, and the results have been most satisfactory, the exophthalmos having decidedly diminished and the sight improved. At the beginning of the treatment she could not count the fingers, being able only to distinguish their movement; now she counts the fingers at twenty feet.

Hypericum (St. John's Wort) for Bed Sores.

Dr. Herbert L. Snow recommends it in the *Brit. Med. Jour.*, December 8, 1883, saying: "My attention was drawn to this remedy, some years ago, by the friends of a patient afflicted with bed-sores. From the slight experience of two cases I can strongly recommend it; it appears to induce healthy granulation and a more or less rapid cure, in a manner which we should vainly look for from alcoholic or balsamic preparations—and this without any smarting from the application. The compound oil of hypericum, which alone I have used, is sold by Mr. Garrad, chemist, of Leamington; I have vainly tried to procure it in London. A recipe in my possession directs that bottles be filled half-full with the flowers of the St. John's wort; olive oil is then to be added, and the bottles are to stand in sunshine for a few days, till the oil becomes of a deep-red color; it is then fit for use, and may be either drawn off at once, or left till required. It is merely brushed over the sore, two or three times daily, with a feather."

Effect of the Atmosphere on the Voice.

Our English exchanges inform us that Dr. Moffat delivered a lecture lately in Glasgow, on voice training by chemical means. Dr. Moffat maintained that the presence of peroxide of hydrogen in the air and dew of Italy had some connection with the beauty of the Italian vocal tone. A series of illustrations by people taken from the audience, who inhaled a chemical compound made to represent Italian air, were largely satisfactory—a full, clear, rich, mellow tone being produced by one application. Several gentlemen present gave their favorable opinion of the new idea. Dr. Moffat's own illustrations were quite unique. Taking what was originally a voice of power and resonance but destitute of intonation, he showed by chemical means this could become a tenor of great range. Some twenty notes, ranging from the lower to the higher register, were sung without any effort by the possessor of a voice of this character.

The Poison of Rheumatic Fever.

Quite a lengthy article on this subject by Dr. David Thomson thus concludes in the *Lancet*, December 29, 1883:

"I am inclined to conclude that the poison of rheumatic fever is derived from without; that, though it arises under circumstances incompatible with the belief that it can be of malarious origin as usually understood, yet it is not improbable that it may be a terrestrial aeriform emanation. And we have ample reason to show that, whatever be the nature of the poison, salicine and its compounds exercise such a beneficial action over it as to entitle them to be called specifics. Nor is the method employed by some, of giving it with a half belief in its efficacy, in small doses, of any utility; indeed, it is worse than not using it at all, for while it affords no relief to the sufferer, it at the same time brings discredit upon a remedy of great value."

The Code of Consultations.

There has been formed in New York City a new County Medical Society, the members of which agree to respect the Code of Ethics with reference to consultations. The position in favor of the new code taken in the New York State Society is principally due to the influence of the members of the City Society, which has led in the movement of free consultations. The new organization is intended to offset this, and has begun its labors by canvassing the physicians of the State. Out of 5219 doctors, 2442 favor the old code, 943 the new, 210 no code, and 1611 have not been heard from. This shows that a decided majority of the physicians in that State are opposed to this new device. In fact, as we have before shown, it was started by a few specialists for their own purposes of gain, and with no sort of reference to the benefit of the profession at large.

The Advantages of Precaution Against Infection in Operations.

This advantage was never more forcibly illustrated than in two cases reported by Dr. Francis Minot (*Boston M. and S. Jour.*, January 17, 1883), of uterine polypi in which operative interference was resorted to. In the one, the woman died, and it was found after death that there was a case of erysipelas in the adjoining room. The second patient, who entered the hospital at the same time, was carefully isolated, and recovered without an untoward symptom. It is well to bear ever in mind that the uterus is a very common channel for the entrance of disease germs, and that when-

ever we expect to have a *raw* uterine surface, it behooves us to take especial care that no germs are in the vicinity.

Too Many Doctors.

The facility of graduating in medicine is so great in this country that the profession is desperately overcrowded. Quite recently a writer in a western journal has undertaken the apparently hopeless task of endeavoring to discourage young men from entering it. "There are now," he says, "90,000 physicians and surgeons in this country, or one to every 500 inhabitants. Indeed, every cross-roads where a grocery or a blacksmith-shop is located, has also the shingle of at least one medical practitioner, and in most cases more than one."

All this is sadly true, and the result of it is that many a doctor derives from his profession not more than a skilled mechanic from his trade, without the latter's chance of increase.

Conium in Malarial Diseases.

Dr. Richard C. Newton tells the *Med. Record*. January 19, 1884, that during the summer and spring of this year he has used repeatedly the following prescription:

R.	Ext. conii fld.	℥ ij.
	Ferri perox.	℥ ij.
	Spts. vini gallici.	℥ ss.
	Quin. sulph.	℥ ss.
	Syr. simp.	℥ ij.
	Ol. menth. pip.	℥ ij.

M. Sig. 3 j. q. four hours until two hours before chill is expected, then q. two hours for two or three doses, then q. four hours.

To children it has been given very successfully by doubling the amount of syrup.

Sierra Salviæ in Remittent Fever.

We have recently noted that it is generally believed that there are certain cases in which quinine is not admissible. In such, Dr. Francis A. Evans (*Nashville Jour. Med. and Surg.*, December 1883,) says that he has had very satisfactory results from the use of *sierra salviæ*. He uses it in the form of fluid extract, in doses of four drops every two hours, combining it with tincture veratrum or tinct. nux vomica.

Helenine and Its Therapeutic Application.

Dr. Valenzuela has had very good results, which he publishes in the *Bull. Gen. de Therap.*, December 15, 1883, from the use of helenine in diseases of the respiratory apparatus, such as

broncho-pneumonia and tuberculosis. It has also proved serviceable in whooping-cough. It has a general tonic effect. The dose is $\frac{1}{2}$ of a grain ten times daily. It may be used by inhalation.

Iron Hypodermically in Anæmia.

Dr. J. M. Da Costa has been using hypodermic injections of iron with good results in a case of combined malarial poisoning and lardaceous disease of the viscera. He prefers a double salt produced by the addition of pyrophosphate of iron to a solution of citrate of sodium. Two grains of the salt, in this form, are given every day, varying the points of puncture, but generally administering it under the skin of the extremities; in this form no abscesses have been observed. With other solutions of iron, including dialyzed iron, abscesses were quite common even with every precaution as to the cleanliness of the syringe.

A Caution About Belladonna Plasters.

One would hardly suppose that serious results could ensue from the application of a belladonna plaster, yet Dr. Martin J. Fleming reports a case of well-marked belladonna poisoning, relieved by opium treatment, in the *Medical Record*, January 19, 1884, caused by the application of a plaster to a back that had been somewhat denuded by the use of an irritating liniment. The case suggests the advisability of cautioning patients against applying such plasters over an abraded skin surface.

More About the Mullein Plant in Phthisis.

We recently noted that Dr. F. J. B. Quinlan had reported a considerable increase in weight in a patient in the pre-tubercular stage of phthisis under the use of mullein. We find a supplemental note in the *Brit. Med. Jour.*, January 5, 1884, from which we learn that this same patient only gained seven pounds eight ounces under the use of cod-liver oil, in the same space of time in which she had gained twelve pounds eight ounces under mullein. Her cure was complete, and the respiration over both lungs is normal.

Dirt Mistaken for Disease.

It was supposed by Dr. C. Mettenheimer (*Schmidt's Jahrb.*) that an old woman of eighty-seven was afflicted with ichthyosis. The foot and outer side of the thigh were covered with brown, horny scales, nearly an inch in thickness, resem-

bling alligator's skin. Warm water and a weak solution of caustic soda demonstrated that these scales were merely the dirt that had been accumulating for twenty-five years, and revealed perfectly healthy skin below.

A Sign of Internal Cancer.

Prof. Verneuil (*La Semaine Med.*) calls attention to the fact that when hemorrhage frequently occurs from the ulcerated surface of an external cancer, it generally indicates cancerous disease of some internal organ, most usually the liver. This occurrence should therefore make us chary about resorting to the knife, until we have thoroughly examined the internal organs.

SPECIAL REPORT.

NO. XV.—OPHTHALMOLOGY.*

BY C. S. TURNBULL, M. D.,

Oculist to the German Hospital, Philadelphia.

(Continued from page 126.)

Hydatid Tumor of Orbit. Ophth. Hosp. Rep., vol. x. 3, p. 301. Lawson describes a cystoid tumor. The patient had complained of diplopia for seven or eight years, until sight was almost destroyed. Exophthalmus then gradually formed. Lawson removed the tumor; recovery without accident.

Étude Clinique et Anatomique sur un cas d'Angiome Caverneux Enkysté de l'Orbite. Laboratoire de la Clinique Ophthalmologique de Lyon, Arch. d'Ophth., vol. ii., No. 3. Eloni removed an encapsuled cavernous angioma of the right orbit the size of a hazelnut, which had developed in a woman of fifty-two, in the course of three years, after a painful inflammation of the eye, as she stated. There was moderate exophthalmus. The tumor lay under the right external rectus, so that tenotomy was necessary in order to detach it from its base. Eight days after the operation, the optic disc appeared white and the blood-vessels thin. Eloni attributes these symptoms to hemorrhage into the sheath of the optic nerve, and to division of some ciliary nerves.

Angiome Caverneux de l'Orbite. Gaz. d'Ophth., No. 6, 1882. Camuset, in a man of thirty-two, observed the development of right-sided exophthalmus, in the course of a year, accompanied by

*From the Progress of Ophthalmology During the Second and Third Quarter of the Year 1882, by H. Magnus, of Breslau, and Others.—*Archiv. Ophthalm.*, vol. xii., No. 1.

symptoms of inflammation and diplopia. It increased during the following eight years—sometimes increasing, sometimes diminishing. The outer canthus was split and the conjunctiva incised, when after dividing the orbital fascia a round tumor became visible, which could easily be detached from its attachments to the external wall and apex of the orbit. The lachrymal gland was removed with it. Recovery within a week. The tumor proved to be an angioma.

Echinococcus in the Orbit (From the Ophthalm. Clinic of Prof. Hirschmann in Charcow.) Wratsch, No. 19, 1882. Barabachew observed the sudden development of exophthalmus in a peasant girl of twelve; motility was checked in every direction; the cornea necrotic. Upward and inward of the globe there was a tumor adhering to the periorbital, which did not fluctuate, and made the impression of a firm neoplasm. Besides amaurosis, there was severe headache. The tumor had been growing for a year. The eye was enucleated, and an echinococcus tumor removed, of the size of a walnut.

Pulsating Exophthalmus; Anterior Venous Aneurism of Right Internal Carotid; Ligature of the Common Carotid. Wratsch, No. 13, 1882. Sklifassowsky, in a man of forty-five, found œdema of the lids and conjunctiva, exophthalmus, wide pupil, and a subjectively audible murmur; the cornea was dull; $V=0$; and the eye immovable. The sound eased when the carotid was compressed, but the exophthalmus remained. Digital compression was tried for a week, but failed. All the symptoms, however, disappeared after ligating the carotid artery. Amaurosis continued, and opacity of the lens developed.

Un Caso di Tenonite Primitiva. Ann. d'Ottalm., May, vol. xi., p. 170. * Ramfold observed a case of primary tenonitis, which begun with chemosis, exophthalmus, and complete immobility of the eye, sight remaining intact. Later, exudative choroiditis set in, destroying vision. The symptoms of irritation disappeared after the conjunctiva had ruptured at the insertions of the superior internal, and inferior rectus muscles, and a quantity of thin pus had been discharged.

Some Thermometric Observations in a Case of Traumatic Diphtheria of the Orbit. Philadelphia Med. Times, July 29, 1882. Heyl reports a case of enucleation for melano-sarcoma. Diphtheritic inflammation of the remaining conjunctiva followed, during which the temperature in the orbit rose to 100° .

Conjunctivites Simples, leur Nature, leur Traitement. Rec. d'Ophth., Vol. III., No. 7, p. 410.

Brachet discusses conjunctivitis in general, and

calls attention to the necessity of treating co-existent affections of the cornea, the lachrymal apparatus, etc. He speaks besides in particular of phlyctenular and lachrymal conjunctivitis. The latter name Galezowski has applied to a form of conjunctivitis produced and kept up by stenosis of the lachrymal duct.

On Credé's Procedure for the Prevention of Blennorrhœa Neonatorum. Arch. f. Gynak., Vol. XIX., p. 258.

Bayer has employed Credé's procedure for the prevention of blennorrhœa neonatorum, the instillation of a two per cent. solution of nitrate of silver, in the Lying-in Institute at Stuttgart, and in consequence did not see a single case among 361 children.

On the Prophylaxis of Blennorrhœa Neonatorum. Correspondenzbl. f. Schweizer Ärzte, 1882, No. 7.

Horner has treated 468 cases of blennorrhœa of the new-born in the course of twenty-two years. In 122 there was severe inflammation of the cornea; in 35 it had already perforated; in 38 the cornea became affected during treatment. Of the last-mentioned, 14 healed without produced maculæ of consequence. Horner is opposed to the procedure of Credé, and to cleansing the eye with a two per cent. solution of carbolic acid in private practice, as the midwives pour the solution directly into the eye and cauterize the cornea. The midwives, however, should be forced to observe the precautions necessary to avoid blennorrhœa of the new-born, by irrigation of the vagina of the mother, by cleansing the instruments and hands, and to give immediate notice in case the eyes become affected.

Traitement de la Conjonctivite Blennorrhagique. Gaz. des Hôp., April, 1882.

Abadie, in blennorrhœa, both of new-born and of adults, cauterizes the conjunctiva from the first day of inflammation with a 3-4 per cent. solution of nitrate of silver every twelve hours. Ice applications must be made besides, if possible, together with a solution of boracic acid.

Ophthalmic-Blennorrhœa Neonatorum. Hospitals tidende, June 21, 1882.

Meyer gives the percentage of blennorrhœa of the new-born in the Lying-in Hospital at Copenhagen. He recommends Credé's procedure as the best preventative.

The Micrococci of Blennorrhœa Neonatorum. Centralbl. f. Prakt. Augenhk., 1882, p. 134.

Krause succeeded in obtaining the micrococci of blennorrhœa pus by impregnating mutton blood-serum with it and treating it in the moist chamber and the incubator. They are always

attached to each other in the secretion in dumb-bell shape. The result of inoculation of animals with the pure material was negative; in a new-born rabbit only profuse suppuration of the conjunctiva set in.

Boracic Acid for Granular Lids. N. Y. Monthly R., February 1882.

Minor recommends the use of boracic acid in form of powder in trachoma, especially in fresh granulations.

Quelques mots à propos du Traitement de la Conjonctivite Granuleuse. Ann. d'Ocul., May, June, September, October, 1882.

According to Abadie, the inoculation of blennorrhœic pus is only indicated in trachoma, when the conjunctiva is still really inflamed, but not when the inflammation is over, the conjunctiva atrophic and the cornea thin, leucomatous or staphylomatous. Five Lustra of Ophthalmological Practice, p. 92.

Mooren, in inveterate pannus, inoculates blennorrhœic pus without fear, as a reliable means of obtaining a cure. The secretion obtained from an otherwise healthy new-born child, affected with blennorrhœa, is the best.

Du Pannus et son Traitement par Inoculation Blennorrhagique. Lille, 1882.

Vilfroy advises the inoculation of blennorrhœic pus in dense pannus of both eyes only, as there is then no danger to the cornea.

L'Ophthalmie Purulente Factice Produite au Moyen du Jequirity, on Liane a Reglisse. Ann. d'Ocul., 1882. July-August; Rev. d'Ocul du sud-ouest, Vol. iii, No. 9, p. 192.

Wecker was informed by a gentlemen who formerly had suffered from trachoma, that he had obtained an excellent result in himself by the use of Jequirity (*abrus precatorius*). The substance is used in Brazil for trachoma, with excellent results. Wecker makes use of it in diphtheria, granulations and pannus of long standing, in order to produce rapid suppuration. A great advantage is that its action can be dosed. Experience must show whether or not it acts advantageously upon the ulcerous processes of the cornea.

Iodoform in Ophthalmology. Arch. f. Ophth., vol. xxviii., p. 214.

Deutschmann uses iodoform in solid form, as a powder and as a salve, and saw injuries of the cornea heal well after dusting it into the eye. It also acted beneficially in operative wounds. It failed in ordinary conjunctival catarrh, blennorrhœic affections, and granular conjunctivitis, but proved very effective in the serpent ulcer of Sémisch.

Bad Results of Dusting Calomel into the Eye. Arch. f. Augenheilk., vol. xi., p. 400.

Hotz reports a case in which calomel was dusted into an eye affected with recent rheumatic iritis, producing severe chemosis of the conjunctiva, and cauterizing it where it came in contact with it.

A Case of Acute Conjunctivitis, Caused by the Electric Light. The Lancet, No. 8.

Rockliffe observed lachrymation, photophobia, pain, and swelling of the lids in a workman whose eye had been exposed to an electric light 3,000-candle power. All of these symptoms developed in the course of fifteen minutes.

De la Xérophthalmie Parenchymateuse et de son Traitement par la Transplantation de la Conjonctive du Lapin. Rec. d'Ophthal., April, 1882.

Galezowski mentions a case of xerosis of the conjunctiva, in which both lower lids were united throughout their whole extent to the conjunctiva of the globe to within two mm. of the corneal margin. The left lower lid was detached, and a conjunctival flap transplanted from a rabbit. The result was satisfactory.

Note sur l'Emploi de l'Acide Borique dans les Affections Externes de l'Œil. Ann. d'Ocul., vol. lxxxvii., May, June, 1882, p. 221.

Stocquart reports three cases of blepharitis ciliaris, seven of conjunctival catarrh, fourteen of phlyctenular, and two of purulent conjunctivitis, all of which were successfully treated with preparations of boracic acid.

On the Knowledge of Pterygium. Mitth. a. d. Konigl. Univ.-augenlinik zu München., vol. i., p. 247.

Harder anatomically examined two cases of pterygium. They showed the development of this anomaly, and furnished the anatomical substratum for Arlt's theory that pterygium is due to the superposition of the swollen conjunctiva over a fresh, but healing erosion of the cornea. The loss of the epithelium of the cornea is a *conditio sine qua non*, as is proven by the condition of the fibrillar connective band between the lacunæ. The advance of the pterygium toward the centre of the cornea is not merely a passive one, as proliferation of the substance filling the corneal defect takes place.

Circumscribed Hypertrophy of the Conjunctiva ("Vernal Catarrh"). These Archives, vol. x., p. 414. Arch. f. Augenheilk., vol. xi., p. 391.

Burnett (3) discusses vernal catarrh. It attacks especially children, and consists of a grayish-yellow nodular swelling of the conjunctiva with a well-defined edge toward the cornea: the

nodules may appear singly, or they may surround the whole limbus of the cornea. The remainder of the conjunctiva of the globe is thickened, and in whites of a yellowish-red, in negroes of a brownish color. Papillary excrescences of the tarsal part of the conjunctiva are also always found.

Epithelioma of the Conjunctiva. Ophth. Rev., vol. i. No. 9, 1882, p. 245.

Griffith saw a grayish tumor which occupied the upper part of the conjunctiva and cornea. The eye was enucleated, and the tumor found to be an epithelioma extending to the optic nerve.

Keratitis Interstitialis Profunda. The Diseases of the Eye in Childhood, p. 320.

According to Horner, diffuse interstitial keratitis (parenchymatosa, profunda, scrofulosa, syphilitica) occurs especially in children, between the ages of five and sixteen. A grayish opacity spreads over the cornea, advancing from the periphery toward the centre, and becoming more and more dense. As the centre becomes opaque the periphery begins to clear up. As a rule, both eyes become affected, though not simultaneously, but at an interval varying from days to months. The disease always lasts a long time. Even in those cases which end well, slight opacities of the cornea remain behind. The macroscopic changes alone of the cornea necessarily lead to the conclusion of a constitutional origin of the disease. While Mackenzie and Arlt designate just this form as scrofulous keratitis, Hutchinson has shown its connection with hereditary syphilis.

Five Lustra of Ophthalmological Practice, p. 109. Mooren believes that *interstitial keratitis* is almost solely due to syphilis, and occurs in combination with the deformity of the teeth described by Hutchinson, although the latter is sometimes seen in non-syphilitic persons. The disease generally makes its appearance in childhood, though Mooren has also seen it in a number of persons of advanced age.

Di un Singolare Fenomeno Patologico di Circolazione della Cornea. Gaz. de Ospitale, No. 22, March, 1882.

According to an observation of Denti, severe supra-orbital neuralgia and pericorneal injection developed in a person of forty-two suffering from iritis and numerous synechiæ, whenever the eyes were strained by reading or writing; at the same time a blood-red spot the size of a millet seed developed in the corneal tissue, three mm. from its edge; it was completely isolated and separated from the limbus of the conjunctiva by an opaque, but non-vascular portion of the cornea.

After a few minutes' rest, a fine red thread was seen to extend from the spot to the corneal margin, through which the blood seemed to disappear in the course of two minutes, leaving a dark gray opacity. The whole phenomenon could be produced at will. All the symptoms disappeared after energetic anti-syphilitic treatment of eleven days; the neuralgia became less severe; after the first few days a milk-white spot appeared instead of the red, and finally the whole opacity cleared up. The author explains the phenomenon by supposing that blood, and later, white-blood corpuscles were forced into the corneal lacunæ by increased intra-ocular pressure.

A Splinter of Glass Borne Two Years and Three Months in the Cornea of the Left Eye. Klin. Monatsbl. f. A., vol. xx., p. 396.

Magnus removed from the cornea of a lady a splinter of glass two mm. long, which had been lying between the lamellæ for two years and a quarter.

Keratoglobus. The Diseases of the Eye in Childhood, p. 339. Horner describes that form of keratoglobus as pure, whose sharply defined boundary and absolute transparency have been determined by several observers. Later in life it may become important only by a change in the refraction and disposition to cataract. In pellucid keratoglobus the cornea appears hazy, the globe is very hard, the pupil of normal size and almost immovable. Eserine generally causes a temporary disappearance of the opacity. If an eye affected with turbid keratoglobus is left to its fate, the opacity comes and goes at varying intervals. The cornea constantly grows, the whole anterior segment of the globe is pushed forward by the distension of pericorneal scleral zone. At the same time the excavation of the disc due to the increased tension becomes more and more apparent. The whole picture of turbid keratoglobus is that of glaucoma; the whole process may be set down as congenital glaucoma.

Five Lustra of Ophthalmological Practice. Page 114. Mooren found that far more women than men are affected with episcleritis. It is generally due to rheumatism and gout, but sometimes it is a complication of scleroderma, menstrual disturbances, and scrofula.

A Chip of Iron Ten Years in the Aqueous Humor. Klin. Monatsbl. f. A., vol. xx., p. 320. By Landesberg.

Foreign Body in the Anterior Chamber. Cronica Oftalmologica, May, 1883.

Santos Fernandez mentions three cases of foreign bodies in the anterior chamber. In the first

they consisted of three particles of stone; in the second, a chip of iron; and in the third, a particle of molten iron. In the first two cases the foreign bodies were removed by keratotomy combined with iridectomy; in the third, by keratotomy alone.

Archiv. f. Augenheilk., vol. xii., p. 90, Holmes, and Williamson, Lancet, No. xii., *extracted eyelashes from the anterior chamber. In Holmes' case, the eyelash had caused traumatic cataract.*

(To be continued.)

CORRESPONDENCE.

Santonin in Gleet.

EDS. MED. AND SURG. REPORTER:—

In perusing the article in the MEDICAL AND SURGICAL REPORTER of January 5, 1884, entitled "Santonin in Gleet," I would say, although I had very little faith in the remedy when recommended for said disease, I nevertheless ventured to give it a trial in a case of some three months' standing, and must be candid in saying, that outside of the narcotic effect and the disturbance of vision and confusion of colors, it had no effect whatever on the gleet discharge, probably owing to the fact of there having been no lumbri in the alimentary canal (as in the case of Dr. Anderson) to produce through reflex irritation a leucorrhœal discharge, and upon the removal of the cause a cure of the disease.

ANDREW L. WITTKAMP, M. D.

117 Green Street, Philadelphia.

Treatment of Coma.

EDS. MED. AND SURG. REPORTER:—

An account of a case of possible poisoning by chloric ether and a bromide, by Dr. S. M. Ward, of Ellenville, New York, which appeared in the REPORTER, December 22, 1883, was to me an interesting one, on account of the many errors therein expressed, as I conceived, both as to diagnosis and therapeutics. Dr. W. promptly obeyed a summons to the bedside of his patient, Dr. A., who was found lying on his back, with normal temperature, pulse about 40 per minute and irregular, eyes half open and glazed, insensible to touch or light, respiration stertorous—which scene soon closed by death.

The death certificate in Dr. A.'s case was made out apoplexy, though the attending physician demurred. What is apoplexy? or the real pathological state of the cerebral body itself? There may be fatal apoplexy from embolism, or from a thrombosis. One in apparent rude health is suddenly stricken down with an apoplectic seizure, the result of too much blood within the brain, and if there is no effusion, no thrombosis, recovery follows; on the contrary, death ensues. How does alcohol act; what are its physiological and therapeutical effects? Alcohol administered to a person in health, increases the activity of the brain, in fact, stimulates or promotes the function

of every part of the human organism, but is followed by a corresponding degree of depression, and if persisted in continuously, frequently produces fatal cerebellar paralysis. As a therapeutic agent it will restore the healthy function of a brain depressed by fear or anger, and simple collapse from excessive depletion may be quickly removed. The indirect effect of alcohol is a *fac simile* to that of ether; acting as a depressant, heart failure may occur by virtue of its depressing action upon the motor influences of the brain, and the impulse of the heart is impeded, if the integrity of that part of the sensorium, which presides over such influences, is not preserved.

In heart failure, dependent upon its many diseases, *per se* it is unaccompanied by brain trouble, at least never preceded by such grave cerebral disturbances, as recounted in Dr. Ward's case.

Recently a young man came hurriedly to my office, greatly alarmed with feelings of impending death; being employed at the time, I requested the patient to compose himself, and quickly procured an alcoholic stimulant, which he failed to swallow, stating that others had recommended the same, and that it made him worse. Then for the first time I examined him, finding a feeble, thread-like, and irregular pulse, great dyspnoea, countenance pale as death, with no perceptible heart-sound. I was impressed with his imminent danger, for he seemingly could live but a few moments, from heart failure. Administering, instantaneously, a full teaspoonful of tinct. digitalis, patient was sound asleep in half an hour, with a good round pulse and uniform warmth of surface.

Walking down the street early one morning, I discovered a young lawyer (down and drunk) lying prostrate upon the pavement. Every attempt by passers-by had signally failed to arouse him. Apprehending imprisonment or something else might befall the poor fellow, I tendered my services. There was profound stupor, stertorous respiration, pulse about forty and irregular, eyes covered with film, general aspect livid. After pouring cold water upon his head incessantly for half an hour, he got up, called for breakfast, and sauntered off for a restaurant. Many similar cases have obtained as rapid relief under my observation.

A few years ago I was called in consultation with Dr. C. to see Prof. W.'s eight-year-old boy, who had plied himself freely from his father's private bottle. He had been subjected to a varied scientific treatment, with fruitless results. His condition was that of most pronounced coma—stertor, pulse slow, irregular, and becoming feeble, with commencing cyanosis; eyes filmy and insensible to touch. After pouring gallons of cold water assiduously on his head, he was left sitting up in bed.

We obtained in the cases cited above the therapeutic effect of cold water upon a cranium filled to repletion with blood, poisoned and unærated; the water, constringing the arteries and veins, distended to their utmost capacity, propelled the blood forward to its proper destination, thereby re-establishing the healthy function of the brain. The physiological effect of cold water upon the head, or its action on the brain in its normal state, even simply by drops unremittently applied, causes death by its direct sedative influence.

I will conclude with the postulate, that Dr. A.'s death-trouble was apoplectic in its nature; when he had recovered semi-consciousness by the spontaneous emesis acting as a revulsive, alcohol was administered—the remedy of all others most contraindicated—which continued to gorge the oppressed brain with more blood, not only exhausting what little excitability was left, but burnt up the limited supply of oxygen inhaled, that was intended to eliminate the poisonous carbon in the blood. Doubtless extravasation did take place, but the remedy, *par excellence*, that always maintains a healthy tonicity of the vasa vasorum, is *ergot*.

JAS. GUILD, JR., M. D.

Tuskaloosa, Ala.

NEWS AND MISCELLANY.

A Request.

Having been appointed by the Adjunct Montgomery County, Pa., Medical Society to prepare an essay upon "The Use and Abuse of Alcohol as a Medicine," to be read on March 7, I do most respectfully ask all physicians who read this to briefly answer the following questions:

1. When should it be used?
2. How is it most abused?
3. Have any cases of inebriety been produced in your practice through the use of alcohol as a medicine?
4. Is alcohol in your opinion indispensable as a medicine?
5. Is there a substitute for alcohol, and what is it?
6. Is inebriety hereditary?

These are serious questions for us to consider, and I am very anxious to have the opinions of honest practical physicians, so I may be able to treat the subject intelligently.

By complying with the above request you will much oblige

JNO. B. CARRELL,

Jeff. Med. Coll., Class of 1876.

Hatboro, Pa.

The Garfield Hospital.

At a recent meeting of the incorporators, it was announced that the total cost of the property, together with the sums thus far authorized to be expended for improvements, would amount to \$49,500, and that a suit in connection with an estate, until lately pending in Philadelphia, had been decided in such a manner that the hospital had come into possession of the funds at issue. A board of directors was elected, including Dr. Samuel C. Busey, of Washington, and Dr. John S. Billings, of the army.

Micro-photography.

Before a recent meeting of the Academy of Medicine in Ireland, Dr. Dickenson made a communication on the art of photographing microscopic objects, exhibiting a number of specimens produced by himself, and the apparatus used for the purpose. Having reviewed the history of micro-photography, he demonstrated that the dif-

ficulties in its application were now in a great measure removed. His apparatus was of the simplest kind, consisting of three parts—the first an inexpensive magic lantern, illuminated by a triplex petroleum lamp, with the ordinary combination of lenses, and an extra tube, with a small bull's-eye condenser; the second, a microscope, placed horizontally, without the eye-piece; and the third a frame to hold the glass screen for focusing the image, and to receive the sensitized plate when photographing. He then exhibited a series of pictures produced by the apparatus.

American Salt Pork.

We note from an exchange that M. Paul Bert, the politico-physiologist, does not believe in American pork, even when well salted and prepared with good brine, as these processes would not prevent the pork being infested with trichinæ. At a recent meeting of the Chamber of Deputies, he protested against the revocation of the decree of the 18th of February, 1881, which prohibited the importation of American salt pork. The rescinding of the decree, he remarked, might not be considered impolitic, but it was certainly against the interests of the public health, which should not be left to the mercy of provincial maires and private cooks. He therefore proposed that the decree of the Minister of Commerce authorizing the importation of American salt pork should be left in abeyance until the subject had been fully discussed at the Chambers. This proposition was adopted by a large majority.

The Medical Profession in France.

According to a writer in a recent issue of the *Gazette Hebdomadaire de Médecine et de Chirurgie*, the number of practitioners (including physicians and *officers de santé*, but not including midwives) has increased from 14,376 to 14,846 since the last census was taken, in 1876; while the increase of the total population has not been sufficient to prevent the proportion of practitioners from rising from one in every 3,807 to one in every 3,235. It is the doctors that are growing in numbers, the *officers de santé* having actually diminished. The latter constitute a lower grade of practitioners, the final disappearance of which is likely to take place without the need of any legal enactment for the purpose. The midwives are even more numerous, and the writer in question estimates that there could be only eighty confinements annually for each one of them, supposing that the doctors did no midwifery.

Sewage Farming.

We recently noted that the sewage farm in the town of Pullman, Ill., had been conducted very profitably. We now read in the *Lancet*, December 15, 1883, that the sewage farm at Reading (England) has not been profitable during the past year, although at first blush it seemed that it had been; but no allowance had been made for the rent of the land. In sewage farming, as in every other kind of farming, everything depends upon the business qualifications of the management.

Retributive Prohibition.

It is proposed that Congress enact a law that would virtually prohibit the importation of French and German wines. In view of the embargo placed upon the shipments of American pork to those countries, it would seem as though a sense of retribution were at the bottom of this measure. Should it become a law, it would prove a very serious matter to the countries in question, in view of the very large importations of wine into this country.

Disinfection of Rags.

Surgeon-General John B. Hamilton, of the Marine Hospital Service, has made arrangements, through the State Department, for the thorough disinfection of all Egyptian rags stored in Alexandria, and bound for the United States. This disinfection is to be performed before the rags are shipped, and will consist in steaming them, and subjecting them to such other disinfectants as may be found necessary to purify them.

Weston's Walk.

Weston, the pedestrian, has undertaken a great walking task. At the instance of some English temperance societies, he has agreed to walk fifty miles a day for one hundred consecutive days, and to deliver a temperance lecture each day after his walk. He is to use no liquor during the time. At last reports he had accomplished about one-half the allotted task, and was in good condition.

Items.

—The death is announced of M. Carrière, for some years physician to the late Comte de Chambord.

—The bazar recently held in Baltimore for the benefit of the Presbyterian Eye, Ear and Throat Charity Hospital, realized \$6,500—net.

—A photographic studio is now attached to most of the French hospitals, in order to make pictures of patients with various diseases.

—Dr. Chunn told a recent meeting of the Clinical Society of Maryland that he had removed the stem of a lily from the bladder of a woman.

—In the *Cinn. Lan. and Clin.*, December 29, 1883, Dr. N. P. Dandridge reports a case of removal of the right kidney, where death occurred from uncontrollable hemorrhage.

—Prof. Burt G. Wilder, of Cornell University, will deliver the Cartwright lecture for 1884, in New York city, February 2, 4 and 6. The subject will be "Methods of Studying the Brain."

—In the *Gaz. Médicale de Paris*, November 24, a case of aphasia with integrity of the third left frontal convolution, but with damage to the subjacent white matter, is recorded.

—In the *Boston M. and S. Jour.*, January 17, 1884, Dr. C. M. Green reports a case of mammary cancer; operation; subsequent catarrhal pneumonia, with cancer of the lungs and death.

—Said an Irish coroner: "Can you tell us, doctor, if the deceased were awake or asleep at

the moment of his death?" His countryman replied: "It is very difficult to say, but possibly he awoke to find himself dead."

—A new journal of public health has just been issued at Bordeaux under the title of the *Revue Sanitaire*. It is edited by Dr. Alexandre Layet, formerly of the French navy, and also Professor of Hygiene of the Faculty of Medicine. The first number contains an excellent historical account of trichinosis, and a criticism of the English system of free trade in pork and other articles likely to contain the parasite.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

In "Fothergill's Hand-book of Treatment," in the article "Body Heat, and Fever," I find the following formula, which he says will probably be "the fever mixture of the future:"

"R. Acid hydrobromic,	3j.
Syrup simplicis,	3ij.
Aque,	
6 <i>td</i> quaque hora."	ad. 3j.

I desire to trouble you to interpret for me 6 *td*. I thought I knew the meaning of all the abbreviations and symbols used in medicine, or could find them. But this 6 *td* gets beyond me. I neither know its meaning, nor can I find it in any book to which I have access. If, then, you will take the trouble to inform me, I shall be much obliged.

Athens, Texas.

T. M. M.

Ans.—6 *td* means sixth. As it is still common in England for physicians to write their directions in Latin, we occasionally see 4 *tā*, 6 *tā*, or 8 *tā*, meaning 4th, 6th, 8th.

MARRIAGES.

BARNES—KILGORE.—At the residence of the bride's parents, Mr. and Mrs. J. J. Kilgore, December 19, 1883, by the Rev. J. H. Fly, J. I. Barnes, M. D., of Daly, Texas, and Miss Jennie Kilgore, of Hondo City, Texas.

ARMSTRONG—COOLBAUGH.—At the home of the bride in Wysox, on December 25, 1883, by Rev. Hallock Armstrong, of Aspinwall, Addison Alexander Armstrong, M. D., of Austinville, and Miss Hattie W. Coolbaugh, all of Bradford county, Pa.

BARRETT—BEACH.—At the residence of the bride's parents, on Saturday, December 27, 1883, by the Rev. Samuel W. Duffield and the Rev. H. W. Ballantine, Louis Randolph Barrett and Alice Butler, daughter of James C. Beach, and granddaughter of the late Rev. Elizur Butler, M. D., of the Cherokee Mission, all of Bloomfield, N. J. No cards.

BURLEY—MOOK.—At "Arcadee," Sound Beach, Conn., on Thursday, January 10, 1884, Dr. C. F. Burley, of Stamford, Conn., and Lillie, daughter of Anna and the late Thos. H. Mook, of New York city.

DEATHS.

CORLISS.—At his residence, Colerain avenue, Cincinnati, Ohio, January 3, 1884, Dr. D. G. Corliss, aged fifty-eight years and eleven months.

DU BOIS.—At his residence in New Haven, Conn., on Sunday morning, January 13, 1884, Henry A. Du Bois, M. D., LL. D., formerly of this city, in his seventy-sixth year.

MOORHEAD.—At his late residence, 256 East Thirty-third street, New York city, January 19, 1884, James Moorhead, M. D., a native of County Fermanagh, Ireland, in the fortieth year of his age.

SHAW.—At his residence, Mt. Lookout, in Cincinnati, Ohio, Saturday morning, January 5, 1884, Dr. Robert Shaw.

SMITH.—At Newtown, Pa., January 20, 1884, Elias E. Smith, M. D.

SMITH.—In Guilford, Vt., December 30, Dr. Hiram Smith, aged twenty-eight years and seven months.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

A CASE OF SCARLATINA, COMMENCING WITH CONVULSIONS, FOLLOWED BY COMA AND HEMIPLEGIA.

BY JOHN T. WALKER, M. D.,
Of Philadelphia.

Read before the Northern Medical Association of Philadelphia.

On the 17th of May, 1883, about 1 p. m., I was hurriedly summoned to see Katie B., æt. seven years, of healthy parentage, previously enjoying good health, but convalescent from a severe attack of pertussis, whom I found in general convulsions of an epileptiform character, and Dr. Green, a neighboring physician, in attendance, who had been called in the emergency, and whom we requested to remain. I then learned that on the preceding day Kate had complained of a slight sore throat, and was almost deaf, and that the mother had brushed her tonsils with a preparation of tannic acid and glycerine, which I had a few months previously prescribed for her. About noon on the above date she was suddenly seized with violent convulsions, which lasted until six p. m.

Dr. Green had the patient put in a warm mustard bath, and had given freely, per rectum, potassium bromide and asafotida, without controlling or modifying the convulsions.

The thought which naturally first suggested itself was, what was the cause of the convulsions? The child had an attack of scarlatina, two or three years previously, according to the mother's statement, who is an intelligent lady, and who

evidently was not mistaken, from the accurate description she gave me of the case. Were the convulsions idiopathic, symptomatic, or sympathetic was the question. Was it a case of epilepsy, meningitis, congestion of the brain, or rupture of a cerebral vessel, weakened by the previous attack of pertussis, acute Bright's disease, or scarlatina?

In the absence of any rash, which did not appear in the course of the disease, I ventured, however, an opinion of scarlet fever from the sudden onset of the attack with vomiting, the sore throat, which I had not yet seen, the high temperature, viz., 106½ in the rectum, and the prevalence of the disease at this time. The pulse was frequent and feeble, between 180 and 200 beats per minute; there was a cyanotic hue to the lips and eyelids, and the case threatened a speedy and fatal termination.

I now gave per rectum fifteen grs. of chloral hydrate, and as the skin was not acting sufficiently, I ventured giving a half drachm of jaborandi fluid extract, and later, ½ gr. pilocarpine hypodermatically, with the effect of producing powerful diaphoresis, hoping to substitute the action of the skin for the kidneys, should uræmia be the cause of the eclampsia, although I must confess that as it is such a powerful cardiac depressant and dangerous drug, I would be unwilling to use it in any but a severe case.

Ether was now used by inhalation for a long time, with the effect of modifying, but not controlling the convulsions.

Dr. Green suggested rectal injections of iced champagne, which had the effect of reducing the temperature two or three degrees. Still the con-

vulsions continued, cold being applied to the head, and the ether continued.

Dr. McCamy, a friend, having an appointment with me at my house, was now requested to see the case. He kindly attended with us, the case being so serious for a few days, necessitating almost the constant time and attention of one of us.

About six p. m. the convulsions subsided, when coma supervened, from which she could be aroused sufficiently to swallow a small quantity of milk and a little iced champagne. Dilatation of the left pupil was now very marked, with complete motor paralysis of the right side, pointing strongly to a grave lesion of the brain, perhaps a clot on the left side. The arm would drop helplessly by the side when raised, as well as the leg when similarly handled.

The question was now, was the brain lesion the cause or the effect of the convulsion. In this case no doubt the convulsions were caused, partly at least, by the direct action of the specific virus of scarlatina on the cerebro-spinal system, and not solely to uræmia, as urine drawn from the bladder immediately after the convulsions, was free from albumen and heavily laden with the amorphous urates, although albumen appeared later in the urine, prior to desquamation of the cuticle. The next morning, the 18th, the rectal temperature was 103°, evening 104°; respiration 40; pulse 160; heart apparently healthy but weak; throat examined and found the tonsils and pharynx red and swollen, tongue coated, patient unable to speak, mouth drawn to one side when opened, the tongue deviating when an effort was made to protrude it; countenance expressionless.

Milk was given every two or three hours, alternating with chicken broth, which could be swallowed with some difficulty. Although there was great prostration, and under ordinary circumstances alcoholic stimulants would be demanded to prevent heart failure, we forbid the use of them in view of the brain lesion which seemed very grave, and which exhibited the train of phenomena which characterize a case of cerebral apoplexy, viz., apoplectic coma and complete hemiplegia, associated with aphasia.

We proposed treating the case antiphlogistically, and ordered a calomel and compound jalap powder purge, and a mixture of liq. potassii citratis, and spirits of ætheris nitrosi, containing $\frac{1}{4}$ drop dose of tr. veratri viridis every two hours. The nape of the neck was blistered with cantharidal collodion. Free evacuation of the bowels followed, the stools being liquid and offensive.

Patient can now say Yes with difficulty, without comprehending its significance, says it entirely automatically; countenance still stupid.

19th. Rectal temperature 102°; respiration 30; pulse 120; patient improving slightly. Potassium iodide 2 grains, and potassium bromide 4 grains, now given every four hours to favor absorption of the effusion; five doses were given in the twenty-four hours, the child receiving careful attention night and day by the devoted parents. The entire body was sponged twice daily, with whisky and warm water. The kidneys were acting nicely, but the character of the urine not known at this time, being passed freely but involuntarily, and not deeming it necessary or prudent to annoy the little patient with the catheter.

20th. Rectal temperature, 100; respiration, 20; pulse, 100-110, still improving; passed a fair night, appetite recovering, drinks milk and beef tea with a relish, and when requested to hand something to her different friends, can tell the right one to whom to give it. The pupil is still dilated, but gradually regaining the normal size. Potassium iodide and bromide continued, also the daily sponging.

21st. Rectal temperature, 100; respiration, 20; pulse, 100-112, varying a little during the day, the morning record being given. Can still only say Yes, but looks more intelligent, and seems to understand pretty well what is spoken without the ability to speak.

22d. Rectal temperature, 99; respiration 26; pulse 100-110, countenance more intellectual; plays in bed with her picture-books and dolls. The same medicine ordered, with the bromide increased to 6 grs., and in addition the following given to relieve constipation: Calomel and sodium bicarb. āā 3 grs., and 5 grs. pulv. rhei., which was followed by three good stools.

23d. Rectal temperature, 99 $\frac{1}{2}$; respiration, 18-20; pulse, 100-110. The patient seems a little depressed from the purge; the pupil is still dilated slightly. The throat trouble has improved, but a bronchial cough has annoyed the patient for the past few days, being relieved by the free use of Tolu syrup, not wishing to use opiates in any form which might excite the brain, and also cause a diminution in the amount of urine.

24th. Rectal temperature, 99°; respiration, 18; pulse, 100; looks better, but cannot yet speak, with the exception of the one word "yes."

25th. Temperature in the mouth, 98 $\frac{3}{4}$ °; respiration, 18-20; pulse, 100; less bronchial cough, which is daily subsiding; bladder irritable, passing the urine frequently, which now contains

about fifteen per cent. of albumen; is opalescent from the amorphous urates; specific gravity, 1.030, and contains tube-casts in small quantity.

26th. Temperature, normal; respiration, 18; pulse, 92-100; urine contains less albumen; no tube casts discovered with the microscope; some epithelium, and a large quantity of pus corpuscles, probably from the bladder.

27th. Temperature, normal; pulse, 90-100; respiration, 18; urine, 1.032, acid, yellow, and clear; patient passed a restless night, the heart being irregular in action; she seemed somewhat prostrated, and now alcoholic stimulants were cautiously given with good effect.

28th. Urine, neutral; pus corpuscles not discovered, but some tube casts. Patient has a good appetite, and looks cheerful, but there is no change in the paralyzed limbs. Prescribed, in addition to the iodide and bromide of potassium, tinct. digitalis and dilute muriatic acid.

29th. Temperature, normal; general health improving, but a severe ulcer has formed over the tibia, from the free use of mustard during the convulsions; dressed it with morphia, oxide zinc, and cosmoline, which afforded relief and gradually healed it.

30th. Urine yellow and clear; specific gravity, 1.010; temperature, normal; respiration, 20; pulse, 100; dilatation of the left pupil not now appreciable; appetite good, and heart regular.

31st. Two weeks from the commencement of the attack. She can now move the arm and leg, the leg better than the arm. The urine contains no casts; no pus, but renal epithelium; sp. gr., 1.020. Desquamation is commencing on the chest, and the face looks a little puffy; same medicine continued.

June 1st. Urine yellow and clear, acid and free from albumen; temperature normal; respiration, 18-20; pulse 100; slept well; appetite good.

June 2d. Magnesium citrate given to keep the bowels soluble.

June 3d. Temperature still normal; urine contains no albumen; the arm and leg about the same; a little pallor caused by the energetic action of the magnesia; the potassium iodide and bromide now stopped, and ferri et quinia citrat. given, alternating with the digitalis and dilute muriatic acid mixture; tongue coated; and lemonade to be given freely, as the kidneys seemed sluggish, the urine being diminished in quantity and also very pale.

June 4th. About 8 ounces of urine passed in the 24 preceding hours; sp. gr., 1.022; acid; patient looks more comfortable.

June 5th. She can speak and count when prompted; can repeat some words plainly and others with difficulty; urine contains epithelium and fragmentary casts; no albumen or only a trace; same medicine continued.

June 6-9. Improving slowly; appetite good; can move the arm and leg a little more; urine free from albumen, density normal; passes larger quantity of it; digitalis mixture now suspended, and 2 grs. potassium iodide in the comp. fl. ext. sarsaparilla given four times daily, also the citrate of iron and quinia; speaks more plainly; can repeat almost everything, and can tell her name, which seems to please her, also her papa's, mamma's, and sister's when requested to name them.

June 10th. Temperature normal; respiration 18; pulse 88; ulcer on the leg healing slowly; dusted it with exsiccated alum, and used the same ointment; general health improving; complains of pain in the arm, shoulder and wrist.

June 12 to 21st. Improving a little every day; urine free from albumen; normal density; increased amount, and no casts discovered.

Potassium bromide again added to the iodide, 2 of iodide and 5 of bromide given three times daily; also $\frac{3}{4}$ grains quiniæ sulphate, with 4 m. tr. ferri chlor. as often. She can now stand alone, but can bear little weight on the paralyzed leg; seems cheerful, and is becoming more intelligent; ordered $\frac{1}{8}$ grain belladonna ext. at bed-time for incontinence of urine with good result, only requiring the use of it two or three times. Faradization of the arm and leg showed electro-muscular contractility and electro-muscular sensibility to be about normal. Desquamation is about completed. Stimulating liniments to be used frequently to the arm and leg were ordered, and from this time on until the 7th of July, the improvement in the use of the leg was marked, when she and the mother went to the mountains, continuing the use of the iron and quinine while away for four or five weeks.

On July the 16th, the urine preserved with chloral hydrate was sent me, and found to be normal, free from albumen or casts.

August 23d. The mother brought her to my office to-day, having returned from the mountains a few days previously. Can walk with ease, but has a slight limp, the toes being a little inverted in walking instead of everted as formerly; cannot use the arm yet; the forearm is flexed on the arm, and the hand drops at the wrist, denoting paralysis of the extensors mainly. Todd considers this condition at a late period in connection with hemiplegia, the result of cicatrization, with the loss of a certain amount of cerebral substance.

Should this unfortunately be the case, her complete recovery could scarcely be possible. With an effort she can straighten the flexed arm and hold it for a moment at a right angle to the body. Her conversational powers are yet very deficient, although there has been a decided improvement. She recognized my little girl, whom she knew before her illness, and whom she called by name, although she had not seen her for over three months.

Ordered the following: Strychnia sulphat., grains $\frac{1}{8}$; quinia sulphat., grains 12; tr. ferri chloridi, 1 fluid drachm, and q. s. syr. lemonis to make 3 fluid ounces. M. $\mathfrak{z}$ j. t. d.

August 31st. Improving generally, but little change in condition of arm.

September 3d. Patient complains of frontal headache, especially after too much exercise, and at times seems chilly, but looks better, and the mother says she uses more words to express herself.

Urine again examined and found to be free from albumen or casts; sp. gr. 1.040, heavily laden with the amorphous urates, readily dissolved by gentle heat; passes urine plentifully, eats well, and sleeps fairly. Can raise the arm better to-day than any day since the attack; the fingers are not so rigid, and the power of extension seems to be gradually returning. Same medicine continued, the quinia being increased to 24 grs. and the iron to a drachm and a half. Stimulating liniments still used freely to the arm.

Commentary.—Such is the brief record of a case of severe scarlatina, usually termed malignant, the diagnosis of which at first seemed somewhat obscure in the absence of the rash, commencing with convulsions, lasting at least six hours, with a high temperature, followed by coma and hemiplegia, sore throat, desquamation of the cuticle extending over a long period, albuminuria, desquamative nephritis, with a slight puffiness of the skin over the joints, and with rheumatic synovitis of a mild character, which frequently accompanies scarlatina.

As this was the most severe attack of the disease for one to survive I have ever seen, I considered the case interesting and worthy of note. Although complete recovery has not taken place, yet as the little patient can walk around and even run, and seems to be constantly improving both mentally and physically, I think the prospect of a good recovery quite encouraging.

—Faith is sometimes personified as a drenched female clinging to a sea-washed rock; but a better personification would be a bald-headed man buying a bottle of patent hair restorer.

COLOTOMY, WITH DEVICE FOR RETAINING FÆCES.

BY T. L. HAZZARD, M. D.,

Of Allegheny City, Pa.

This operation is reported to the medical profession not alone because it will add to the record of successful cases, but also because of the apparatus devised for retaining the alvine discharge. The inefficient methods now in use are so distressing to the patient and a source of such perplexity to the operator, as to be considerable of a barrier in deciding the advisability of an operation. The apparatus here used answers the purpose.

Case.—Mrs. N., æt. 50, married, without issue. Ill health began by constipation, headache, and pains through the lower abdomen, loss of appetite, etc. Constipation increased until no solid matter passed; cathartics and injections were futile. October 15, 1881, Dr. Jos. Dixon saw the case. Digital examination of the rectum showed a nodulated stricture about the sigmoid flexure. The smallest probe would not pass the constriction, solid matter had not passed for two months, and for two weeks no matter whatever. The colon, from the sigmoid flexure to the ileo-cæcal valve, was packed with hardened fæces. There was great pain and constant tenesmus. The skin stained bronze; patient thin and weak. Morphia in gr. ij. doses was required to allay pain. She had been fed entirely upon liquid diet. The operation, as advised by Stephen Smith, was performed by Dr. Dixon without any departure being found necessary. The impacted fæces were removed gradually day by day by means of injections of warm water. The improvement was rapid. She recovered her natural color, was free from pain, and with the exception of a little supuration in the upper border of the wound, no bad symptom appeared. The disturbance of temperature and pulse was trivial. Treatment tonic, with an occasional $\frac{1}{2}$ grain of morphia.

In 14 days she was down stairs, in 3 weeks walked out of the house, and in 6 weeks could easily perform her household duties.

The fault of the instruments for retaining the faecal matter is, that if not solids, then surely juices or gas will escape, and when pads of oakum, cotton, or any absorbing material, are used, they must be frequently changed, or a very unpleasant odor attends the unfortunate person. The appliance constructed by Dr. Dixon so well meets all indications, allowing not even gas to escape, and is withal so comfortable, that he is encouraged (after three years of trial in the above case) to re-

port it, hoping it may prove of benefit to surgeons. The most important part can be made by the surgeon himself, and the rest by any instrument-maker or harness-maker. It is made as follows:

When the wound has entirely healed a plaster cast is made of that part of the side contiguous to and over the artificial anus. When the plaster is dry, make a positive cast. A piece of hard rubber three inches wide and about six inches long is to be heated in warm water, and made to conform to the shape of the cast so that the artificial opening will be at the centre of the plate of rubber. Dr. Dixon had proceeded this far when he found that the ball of his thumb exactly filled the opening made into the gut. He carried a piece of ivory (a broken billiard ball) to the turner and had it turned the exact counterpart of the base of the thumb. This was made flat on one side, and screwed firmly to the hard rubber plate so that it would project into the artificial anus, closing it to the exit of alvine matter, and at the same time keeping the opening patulous. A slot is then made in each end for the attachment of straps which go around the body and fasten with a buckle in front. (See cut No. 1.) The strap

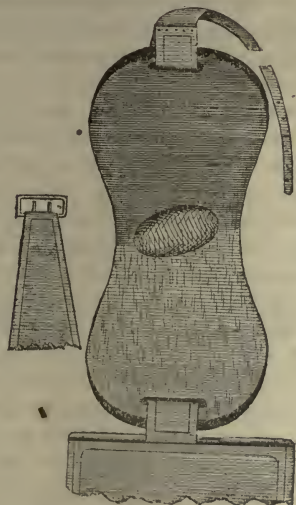


Fig. 1.

crossing the back is broad and padded. It was at first kept from slipping up by bandages crossing between the legs, but this was so inconvenient, besides causing irritation, that elastic ribbons were fastened at points of the appliance, and carried to a leather case around the thigh. (See Fig. 2.) The pelvic bones will, of course, keep it from slipping down.

The advantages of this over other methods are:

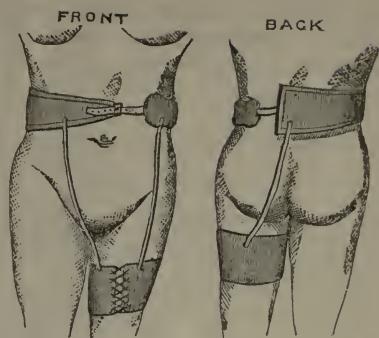


Fig. 2.

1. It dispenses entirely with the use of bougies. In this case the opening, after three years, has not contracted in the least.

2. It is cleanly, preventing the escape of solids, fluids, gas, or odor.

3. It is perfectly comfortable.

4. It is inexpensive and easily made.

5. The materials of which it is made (hard rubber and ivory) are innocuous, non-irritating, and not capable of absorbing and retaining discharges.

In this case, the patient can easily evacuate the bowels partly by voluntary effort, partly by pressing the abdomen with her hands. She keeps a little cloth between the pad and the skin. This has an aperture for the ivory plug. She anoints the adjacent skin with zinc ointment occasionally. This is the only care it requires, with the exception of an $\frac{1}{8}$ grain of morphia, to control the bowel when she is out of the house for any length of time, making calls or at church. Recent examination shows the lower bowel atrophied to a cord.

A SUMMARY OF REMEDIES FOR THE RELIEF OF SYMPTOMS IN THE ADVANCED STAGE OF PHTHISIS.*

BY MARY HALLOWELL, M. D.,
Of Hatboro, Pa.

As the cough in phthisis often arises aside from the increased secretion of the larger tubes, from an increased reflex excitability of the mucous membrane, and often more or less bronchial and laryngeal ulceration, it is impossible to remove the cause; it can then only be palliated, which should be done—if it becomes paroxysmal and exhausting—otherwise it should not be interfered with.

*Read before the Adjunct Montgomery County Medical Society.

If associated with dyspnoea, arising from tenacious catarrhal products in the tubes, ammon. carb. is indicated, given as follows:

R. Ammon. carb.,	gr. v.
Vin. picis liq.,	gtt. xv.
Syr. acaciæ,	gtt. xx.
Aq. anisi,	q. s. ad. f. ʒj.
M. Sig.—Take every three hours.	

The syrup of acacia disguises the carbonate of ammonia, and also has a beneficial influence on the mucous membrane.

The syrup of wild cherry may be substituted for the tar when a tonic and sedative is indicated in place of the more stimulating tea. If the expectoration be scanty and the cough spasmodic, troches of morph. and ipecac (containing gr. $\frac{3}{10}$ of morph.), generally affords marvellous results.

Oxalate of cerium is beneficial when violent coughing with free expectoration exists with decided gastric disturbance.

It not only quiets the stomach and lessens expectoration, but also exerts a striking influence in diminishing the severity of the cough.

It does not operate well when expectoration is scanty, and because of its tendency to dry the air passages cannot be continued with advantage longer than a few days at a time.

Inhalations are sometimes serviceable, and with some physicians are the sole remedy employed.

The list of agents which can thus be administered possesses the advantage of medicating the air passages directly, without disordering the stomach in passing through the general circulation, and whose virtues are not to be measured by their merely antiseptic qualities.

Of these we have lime and belladonna (gr. j.— $\frac{3}{4}$ iv.), or if the secretions be fetid, carbolic acid may be added, after the combination used by Dr. Coghill, of London, which is composed of

R. Creasoti,		
Acid carbolic,	āā	ʒj.
Tr. iodid. co.,		f ʒij.
Alcohol,		f ʒ iss.

This diminishes the quantity of expectoration, allays cough, lessens, or entirely destroys, fetor of breath.

It may be administered by an extemporized respirateur, made of a cylindrical box, with a perforated cap, in which is placed the absorbent cotton on which the solution is dropped. To be inhaled once or twice daily 10 to 15 minutes.

In the later stages, when the cough is long-continued and interferes with sleep, acetate of morph. may be given with tr. sanguinarie.

The pains in the chest may be dissipated by counter-irritation in the form of tr. iodine and

croton oil or mustard or belladonna plaster. Sometimes a flannel bandage worn around the waist affords a relief not to be obtained from drugs.

The fever requires special treatment. This symptom will not entirely disappear until the substances which cause it are entirely expelled from the body, and for the purpose of abating it, quinia and digitalis, are the main treatment, but neither should be given continuously on account of their injurious influence on the stomach.

Our main reliance, therefore, should be, diet and rest of body. Food should consist principally of milk, boiled grains, and stewed fruit, with a little bread.

Salicin in doses of gr. xx., two hours before the onset, sometimes acts like a charm.

"The night-sweats," Rousselot says, "are entirely subordinate to the fever, and are an effort of nature to reduce the febrile movement, by a diversion to the stomach." He also maintains that when there exists a considerable rise of temperature, with no nocturnal perspirations, we get a diversion towards the intestinal surface and diarrhoea appears. Hence he concludes that it is not always right to check the sweating, especially when it comes on at the commencement of phthisis and accompanies a rapid evolution, pulmonary tuberculization with high fever and active pulmonary congestion.

That in such a case to attack the perspiration is to attack the effect, and not the cause, and is not likely, therefore, to be attended with success. But when abundant sweating occurs, together with a normal flow of urine and frequent diarrhoea it is necessary to direct our therapeutic efforts to arrest the excessive drain on the system of the remedies to be employed. Sponging the surface with whisky and alum is often beneficial. Tablespoonful of whisky at bed-time and another at period of awakening may be given with advantage. If medicines are to be employed, we have a favorite combination in ext. bellad. gr. $\frac{1}{4}$ in pill-form with oxide of zinc, gr. ij. Give one at bed-time.

Dyspnoea, or air hunger, if caused by lungs being choked up with tenacious catarrhal products may be relieved by ammon. chlor; if caused by an over accumulation of secretion in lungs, by an emetic, like ipecac or turpeth mineral.

When caused by reduced breathing capacity of lungs, inhalations of oxygen must be resorted to.

Hæmoptysis requires rest in bed, cold to chest in form of ice, and the internal administration of ergot, ipecac, acetate of lead and gallic acid. Acetate of lead is objectionable because it is a de-

stroyer of tissue. Ergot is physiologically indicated and is quite as beneficial as any.

Monsell's solution, gtt. v—x., $\frac{3}{4}$ j., aq., is used frequently in inhalation.

For irritable stomach, Fowler's solution, gtt. ss.—j., given three times a day before eating, has given good results, and we have in acid hydrocyn. gtt. j. a generally successful remedy.

For the diarrhœa, if occurring early in the disease and dependent on excess of acidity, as told by tongue, give bismuth or chalk mixture.

If later, and dependent on tubercular ulceration, resort to any of the various astringents. Avoid beef tea, and give rice-water as a drink instead of frequent use of water.

A FATAL CASE OF PYÆMIA, WITH POST-MORTEM EXAMINATION.

BY VIERLING KERSEY, M. D.,
Of Pittsburgh, Pa.

Wm. H. G., single, of previous good health, and a brakeman by occupation, was admitted to the West Pennsylvania Hospital on March 26, 1881,

Shortly before admission he sustained a crush of the middle finger, and a laceration and fracture of the index finger of the right hand, while coupling cars. The middle finger being hopelessly crushed, was amputated by Dr. James McCann, and the head of the respective metacarpal bone removed.

The wounds were then carefully cleansed by carbolyzed water, and a dry dressing applied.

Everything progressed favorably until April 2, six days after admission, when patient complained of some pain about the wound; the stitches were removed, and a small quantity of sero-sanguinolent fluid oozed away. On the following morning patient's temperature was $105\frac{2}{3}^{\circ}$; pulse 124. He complained of pain and stiffness of the muscles at the back of the neck, of headache, and anorexia. Afternoon, he vomited a greenish fluid, and experienced some difficulty in separating the jaws, owing to stiffness of the muscles of mastication.

On the morning of the 5th he had a slight chill, followed by profuse perspiration; his temperature in the evening rose to $106\frac{2}{3}^{\circ}$; at this time he was ordered ten grains of quinia sulphate, to be repeated if the temperature did not decline within three hours. The dose was repeated at the expiration of this time, and no effect upon the temperature was detected by the thermometer.

April 6th. Bowels have not moved for three days. Ordered him to have five grains aa of pulv.

rhei and hydrarg. chloridi mite, with grs. ten of sodium bicarb. Also ordered one three grain pill of sulphate quin. thrice daily. Temperature this evening is $106\frac{2}{3}^{\circ}$.

April 8th. Morning temperature, $104\frac{1}{2}^{\circ}$ The extremity of the index finger is gangrenous, and was clipped away with the scissors. The left wrist is swollen, hot, and painful. Ordered grs. xx. of salicylate of sodium thrice daily.

April 9th. Passed a more comfortable night than at any time since onset of complications. Had free evacuation of bowels to-day, discharges being thin and dark-colored. Temperature, a. m., 104° , pulse 106; 5 p. m., temperature 107° , pulse 112. Cold sponging for fifteen minutes caused temperature to decline one degree.

April 10th. Temperature at 8 a. m., $103\frac{1}{2}^{\circ}$, pulse 105. Was delirious during the night, temperature ranging between 107° and $103\frac{1}{2}^{\circ}$. Eight sponge baths with tepid water were given during the night, and each produced a temporary declination in the temperature. Bowels moved freely, and urine drawn by catheter; Hj . of sodium hyposulphite was ordered every 3 hours. At 10 p. m., temperature $105\frac{1}{2}^{\circ}$, pulse 114. Delirium, diarrhœa, tympanitis, stools thin, dark-colored, and very offensive.

From this time he grew weaker and more delirious, had evacuation of the bowels and bladder in the bed, without asking for a vessel. Troubled sleep was induced for as many as three hours at a time, by large doses of bromide of ammonium and chloral. Temperature varied little, ranging between $106\frac{2}{3}^{\circ}$ and 105° .

Died at 1.50 a. m., April 15th, having been in the hospital twenty days, and having been sick of the complication noted in the foregoing report for the past thirteen days.

Autopsy twelve hours after death.—Liver and spleen enlarged, former weighing $6\frac{1}{2}$ pounds, latter dark and soft, and very friable in texture.

Thoracic Cavity.—Left pleural sac contained about three pints, and the right about two pints of fœtid ichorous pus.

The pleura were roughened, and bridles of lymph passed between the costal and pulmonary surfaces. The lower lobe of the left lung, and the posterior part of the upper lobe, were solidified, and sections sank when placed in water. The heart contained two clots, one in each ventricle. That in the right was an ordinary post-mortem blood-clot. That in the left was softened at the centre, and contained pus of a greenish color. The left wrist contained about two ounces of pus in and about the joint.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE
PHILADELPHIA HOSPITAL.

BY CHARLES K. MILLS, M. D.,

Neurologist to the Hospital, and Professor of Diseases of
the Mind and Nervous System in the Philadelphia
Polyclinic.

Reported by WILLIAM H. MORRISON, M. D.

**The Treatment of Hysterical Paralysis by Rest,
Massage, and Electricity.**

GENTLEMEN: I propose this morning to give you a lecture on rest, massage, and electricity, in the treatment of hysterical patients. A certain number of cases embraced under the the general head of neurasthenic or hysterical cases and a few other cases not coming under these heads, are best treated by the method known as the rest, massage, and electrical treatment.

Let us first take this patient and see if we can make the diagnosis, for I believe that she would be a suitable subject for this plan of treatment. She has been in this hospital a number of years, and before coming here, she had been to other hospitals. She came under my care in 1877, and at that time she was more helpless than at present. For a time she was in the orthopædic hospital under the care of Dr. Mitchell. While under his care, she regained the use of her limbs, and left the hospital walking. This was in 1875. This power was lost when she came under my charge, but after remaining here for several months, she regained the use of her limbs, and was able to walk to a certain extent. She was then sent to the out-wards, but again relapsed into the condition which she now presents. In other words, you have a history of complete or almost complete paralysis of the lower limbs, with several recoveries and recurrences of the helpless condition. She says that it is two years since she was able to stand alone, that she has no feeling in the limbs, and that the arms are a little numb. She has full control over the bladder and bowels, but has occasional diarrhœa. She does not remember ever having had any spasm. In looking at the patient you see that she is well nourished, and that during these many years she has not failed physically or mentally. The lower limbs are well preserved as far as their general appearance is concerned. The temperature is good. When I ask her to move the limb, you see that she apparently has but little control over the muscles of the leg and foot. Examining the patella reflex, I find that on both sides it is considerably exaggerated.

You have here the few points which will enable us to make the diagnosis. These I will give to you, for it is, of course, a question of great practical importance to determine whether you have a case of curable or of incurable paralysis. The case may present itself as one of paralysis of the lower extremities, or as one of hemiplegia, or as one of paralysis of one arm or leg. Here we shall restrict ourselves solely to this case of presumably hysterical paraplegia. If in a case of this kind, there is a history of the hysterical diathesis or of hysterical manifestations extending

over a number of years, no matter what form they may have taken, the presumption is that the case is not one of true organic trouble. The hysterical condition may have revealed itself by the occurrence of hysteroid spasms, or by aphonia, or, as in this instance, by attacks of paralysis with recovery. This latter fact points strongly to the hysterical nature of the paralysis.

Another important point is the fact that it is rare for cases of true hysterical paraplegia to have any great disorder of the bowels or bladder—any *uncomfortable* disorders of these organs. There is rarely any paralysis, either of the sphincter of the bladder or of the bladder itself; no dribbling is present, such as occurs in paralysis of the sphincter or dribbling from overflow as appears in paralysis of the walls of the bladder. Sometimes, especially if the patient learns that a symptom of this kind is to be expected, she will succeed in having apparent paralysis of the sphincter. Here we have had no history of trouble with the bladder. The same is true of the bowels, except occasional diarrhœa.

When you come to examine the limb, remember that the completeness of the paralysis is no indication of its organic character; indeed, I should say that the absolute completeness of the paralysis with retention of the nutrition of the limb, is rather an indication of the hysterical nature of the trouble. In other words, in most cases of focal myelitis, in tumors of the cord, in the various forms of sclerosis, posterior, disseminated, and lateral sclerosis, and so on, the apparent paralysis is not absolutely complete. If destruction of the lumbar enlargement of the cord has occurred from fracture of the vertebræ, syphilitic tumor, hemorrhage, or any other cause, there will be paralysis almost as complete as in this patient, but in addition to the phenomena which she presents, wasting of the limbs and loss of muscular contractility will also be marked.

Two diseases of the cord give phenomena closely allied to those of hysterical paraplegia. One of these is a focal lesion in the mid-dorsal region. If a patient has a tumor of the membrane of the cord, pressing upon the cord and causing dorsal myelitis, he will present symptoms resembling those of this patient, but in nearly all of these cases, there will be in addition, sooner or later, some involvement of the bladder and bowel, and certain localized phenomena of pain, which are not present here. The second affection giving symptoms allied to those of hysterical paraplegia, is spasmodic tabes or lateral sclerosis. This is a disease in which the lateral columns of the cord are supposed to be sclerosed. Here, again, you have phenomena not present in this case. If the patient is closely examined, a condition of tonic spasm of the muscles of the thigh and other muscles of the limb will be found. These spastic phenomena are bi-lateral. The limbs cannot be flexed as readily as I flex the limbs of this woman. The patella reflex is also more exaggerated usually in this form of paralysis than in hysterical paraplegia. In hysterical cases and in lateral sclerosis the contractility of the muscles to electricity, is preserved. The condition of sensation varies in different cases of hysterical disease. Sometimes, more or less anæsthesia will be found with the paralysis. This patient has varied at different

times as regards this symptom. In spasmodic tabes, there is no loss of sensation. In the case of lesions in the mid-dorsal region, the condition of sensation will depend upon the fact whether the anterior or posterior region of the cord is pressed upon.

What may be called the moral examination, or the moral control which you can exert over a patient is of importance. In hysterical paralysis, it is possible to have the patient walk or stand, if you are strong-willed and know how to use your will; whereas, in organic paralysis, this may be entirely impossible.

How should this patient be treated? No golden road to the cure of hysteria is known, any more than to the acquirement of wealth. Nevertheless, certain methods of treatment have proved more successful than others. Sir James Paget, in explaining the supposed pathology of this disease, remarked, "These patients say, 'I cannot.' It looks as though it were, 'I will not,' but the trouble is 'they cannot will.'" This remark would apply very well to this patient. In this expression you have the theory of the pathology of this disease. Hysteria is not uterine trouble. I think this is the opinion of every one who has to any extent studied nervous diseases. So far as the mere uterine trouble is concerned, it is the accompaniment, or the exciting cause of a special hysterical attack, or may serve to increase its symptoms. The uterine trouble *per se* has no more to do with the production of hysteria than have the various derangements of the stomach, or any other organ. The great point, independent of medicinal, hygienic, and other treatment, is to learn to rouse the will of the hysterical patient. This is a cerebral disease, if it is anything; yet it is not an organic cerebral disease. In hysteria, you very often have the same condition that is produced by hypnotizing or mesmerizing a person. There are patients in this hospital who can be hypnotized, as I have shown in this clinic. They will then be at my beck and call, insensible to pain, and, it may be, incapable of moving for a certain length of time. In this, you have the conditions presented by this patient. What is done in mesmerizing a patient? The only theory that is at all tenable is, that in some way certain regions of the brain are inhibited or restricted from acting. You must call off this restraint in hysteria.

The first thing to be done in the treatment of these cases is to secure the confidence of the patient. If you are certain of the diagnosis, you can assert positively that you can cure her; but it is often impossible to cure such patients at their own homes, where they are surrounded by sympathizing friends. Under these circumstances, it is impossible to carry out the various methods of treatment which should be adopted. One of the first elements of treatment is seclusion and isolation. When a patient of this kind comes from a distance to be treated, the best thing to do is to put her in a private hospital, and, if we can afford it, under the care of two trained nurses. You will not be able at a stroke to order these patients to get up and walk. They are, owing to the position in which they have been so long, often in a bad condition, so far as circulation and nutrition are concerned. Some method of helping the will,

some mode of assisting the moral treatment, which is the main treatment of hysteria, is required. Thus it is that rest and seclusion, with massage and electricity, are useful. In some cases full feeding is to be added. This is especially applicable in neurasthenic cases.

I shall to-day have time to speak only of massage and electricity. In using these agents, the best plan is to use one one day, and the other the next. I believe that these two amount to nearly the same thing. They should be practiced midway between meals.

Let me give some idea as to the way in which massage should be performed. I am of the opinion that massage should nearly always be combined with the Swedish movement cure. These two are not the same. Massage is a process in which you rub, strike, percuss, and knead the muscles of the patient, the patient not resisting or attempting to make any movement. In massage, you begin at the toes, first manipulating one toe, then proceeding to another. Then having finished the toes, you next proceed to the joints of the foot, kneading, rubbing, and stroking the muscles. The muscles of the leg are next manipulated. The whole body can be gone over in this way in the course of from half an hour to an hour.

Having carried this out for a week or two, some form of movement should be combined with the massage. In the Swedish movement cure, one object is to call out the suppressed will of the patient. You see that this is very applicable to cases of hysteria. The cure of cases of this kind is often delayed by using massage alone, which is absolutely passive. There are three kinds of movement in this treatment:

1. Passive movements.
2. Active movements.
3. Duplicated active movements.

A passive movement is a movement which is performed on the patient, and is really what is done in most cases by the masseur.

A single active movement is one performed by the patient. Thus, if he kicks, that is a single active movement.

The duplicated active movement is the one which we should perform, or attempt to perform, in connection with massage in hysterical patients.

By this term is meant a movement in which both the patient and operator take part. The operator performs a movement on the patient, which the latter resists, and again the patient tries to perform a movement, which the operator resists. The very substance of this is to call out that which is at the root of hysteria—the want of will power. For instance, you take a foot which, after rubbing, kneading, and so on, you try to flex, at the same time telling the patient to resist you. Then you extend the foot, and the patient again tries to prevent the movement. The other joints of the body are treated in the same way. This is an insinuating, coaxing treatment, and one which will enable you to gain control of the patient in spite of her. As the patient exerts her power, you should yield and allow the part to be moved. The skillful operator knows how much to yield and how much to hold. You see the vital importance of this treatment to substitute massage and the electrical

treatment; by the latter, nutrition and the circulation of the skin, and deeper parts are improved, while by the first you do that which is at the bottom of all successful treatment—you hitch the patient's will to the patient's muscles.

With the plan of treatment already described, electricity should be combined, using it on alternate days. The method of electricity is very simple. The objects to be attained by the use of electricity are the same as in the use of massage and duplicated active movements: in the first place, the improvement of the circulation and of the condition of the muscles, and in the second place, making the patient use the muscles. The Faradic battery should be used in these cases, and the patient should be in a relaxed condition, preferably in bed. There is a method of electrical treatment introduced some years ago by Beard and Rockwell, which is known as general faradization, and is sometimes applied in the office. It can be used in cases of this kind where the patient is not confined to bed. In this method, the patient is placed in a chair, with his feet on a large plate covered with chamois skin; the operator then takes hold of the patient's hand and the other electrode is passed over the muscles of the neck, back, trunk, and extremities. When the patient is in bed, as in the regular rest treatment, this method has to be modified, and then the best treatment is by direct muscular faradization. In this method two sponge electrodes are employed. The sponges are moistened so that the current may pass through the skin and reach the muscles. Both electrodes are taken in one hand, the handle of one being between the first and second fingers, while the handle of the other is between the third and fourth fingers. In this way, the distance between the points of application can be readily altered. The current is then applied to the muscles, beginning with those of the feet, picking out each muscle; then passing up the limb, applying the current to each muscle. You should always remember to relax the muscle before passing the current through it. The whole body can be gone over in this way in the course of half an hour.

It is astonishing to see how cases of many years' standing will improve under treatment of this kind systematically carried out. During the first week, you should not attempt too much; but after a couple of weeks, the patient may begin to sit up and use the limbs in a sitting position. In some cases all this can be done, as it were, in the twinkling of an eye. Some marvellous cures are accomplished in such cases as this. In the majority of cases, you will have to carry out a treatment of this kind to accomplish a permanent cure, and it can be done in every case if you understand the patient. I come back to the point at which I started—the first thing is the diagnosis. Having once made the diagnosis, you can promise an absolute cure. This assurance will often aid in bringing about recovery.

—Holmes says: "Diagnosis has reached a wonderful degree of accuracy; prognosis has become a terrible kind of second sight which is not always handled carefully enough; treatment gains a little with every decade."

MEDICAL SOCIETIES.

NEW YORK NEUROLOGICAL SOCIETY.

Note on the Use of the Menthol Cone as an Anodyne.

Stated meeting, January 8, 1884, Dr. William J. Morton, President, in the chair.

Dr. E. C. Wendt showed a little contrivance, called by the Germans "migräno stift," and explained the method of its application and uses. It consisted of a piece of menthol moulded into a conical shape and secured in a little wooden box, closed by a cover to prevent evaporation, soiling, and breaking. It seemed to be very little known here, although it was much used abroad, especially for sick-headache.

His attention had first been directed to the anodyne properties of menthol by a short notice, published in the *Medical Record*, of April 28, 1883, by Dr. Carmann.

That gentleman had recommended an alcoholic solution of menthol (3 i. to 5 ss. alcohol) to be painted over the affected parts. Dr. Wendt had since that time often used this solution, and found it a rather reliable anodyne.

Its pain-relieving action was restricted, however, to the slighter ailments, especially those of a neuralgic character. Since his acquaintance with the solid menthol-cone, he had frequently substituted the direct application of menthol by means of the latter, for the solution formerly employed. He would admit that the only advantage which the solid cone or pencil had over the solution consisted in the greater simplicity of its application, its ready portability, and the fact that its vapor was not apt to irritate the eyes of susceptible patients. He had repeatedly heard complaints in that direction from ladies, regarding the solution, which was obviated by using the cone.

In this country menthol had not yet received that amount of recognition from the profession, to which its pain-obtaining properties would seem to entitle it. In fact, little seemed to be known about it, and for this reason, Dr. Wendt thought it might not be amiss to quote a descriptive notice which had appeared in the *Midland Medical Miscellany*, of October, 1883.

"Menthol, or menthylic alcohol, $C_{10}H_{20}O$, is a crystalline substance, deposited from the oil of peppermint, prepared in China and Japan from *mentha arvensis* var. *piperascens* and *glabrata*."

It formed the chief ingredient of a much-valued remedy for neuralgia before its nature or source was generally known. Under the name of Po, ho, yo, or *Gouttes Japonaises*, it has been sold in small bottles, labelled with Chinese characters.

It is a white crystalline steareptene, melting when pure at 97° Fahrenheit, and is obtained by the Japanese from the oil of peppermint, by submitting it to freezing several times in succession until no more menthol crystallizes out.

It is also said to be contained in the American and English oils of peppermint, but probably in small quantities only. It is somewhat surprising that the Japanese peppermint plant, which is grown in England as a curiosity, has not been cultivated in that country as a source of the drug,

the supply of menthol being uncertain, the demand great, and the price in consequence occasionally very high.

Menthol is said to be sometimes adulterated with crystals of Epsom salts, to which it bears a great resemblance. These being insoluble in alcohol or chloroform, in which fluid menthol is freely soluble, can easily be detected. Samples of fine crystals sometimes contain some essential oil, adhering to them, a fact which must be taken into consideration, when the menthol is made into cones or pencils.

Menthol is but slightly soluble in water, although imparting a strong odor and taste to that liquid, and is soluble in aqueous alkalies. It is soluble in fixed and volatile oils and in ether.

Although Dr. Wendt's experience with menthol had not yet been a very extended one, it had nevertheless been sufficient to convince him of the utility of the drug, in a rather large class of cases. Thus, as already stated, he had found it a pleasant and reliable anodyne in all the lesser neuralgias, and especially in those so frequently occurring about the face. But it was also serviceable in many painful affections, due to inflammatory processes. For example, in the cervical adenitis so often accompanying sore throat, and in numerous other affections where pain was a prominent symptom, menthol might be used to advantage. With regard to its topical action it was similar to that of aconite, over which it had the advantage of not being poisonous.

Dr. Wendt remembered one rather striking case of quite severe supra-orbital neuralgia, which refused to yield to the oleate of aconitia, but was much benefited by the menthol. But on the whole, in violent attacks, he had found it almost useless. In typical migraine for instance, where the pain was at all severe, and in all deep-seated aches, of more than very moderate intensity, it had no appreciable effect, except perhaps the indirect psychical action of distracting the sufferer's attention.

In the discussion which followed these remarks, Dr. Roberts asked Dr. Wendt if he had tried the prolonged application of menthol.

Dr. Wendt said that he had in some cases of hemicrania, though without decided benefit. Nevertheless, the patients experienced a pleasant sensation of coolness of the surface followed by a feeling of agreeable warmth.

Dr. Morton desired to ask Dr. Wendt, in what sense he used the word anodyne. Dr. Wendt said in the usual one, of affording relief from pain by blunting sensibility.

Dr. Morton thought that menthol probably acted more after the manner of counter-irritants, by insuring relief in a reflex rather than directly local way. Mustard was a typical peripheral nerve-irritant, and it seemed to him that the action of menthol could be best explained on the same principle, of procuring peripheral nerve-impressions in a reflex way.

Dr. Morton continued that his attention had been first called to the menthol-cone by Dr. Wendt. He chanced to be at the latter's office one day, when suffering from a headache. A few strokes of the menthol gave him at once a sense of relief. He felt the effects of the peppermint to

be as gratefully cooling as the application, say of cold metal. In brachial neuralgia, as well as in sciatica he had been pleased with the good effects of menthol. He thought the drug was deserving of further trials.

Dr. Ralph L. Parsons then read a paper on

Detention in Asylums.

The reader spoke first of the question: Whether sane persons were not often improperly or unjustly detained in Asylums for the insane; and secondly, whether many uncured and incurable patients who were now methodically detained in asylums might not advantageously be returned to their relatives, or placed in the care of private families under State supervision?

It was assumed in the first instance that the detention of patients after recovery had taken place, for a longer time than might be required, was quite possible, and even probable in some instances. But he claimed that such detentions were not usually of serious import to the patient; that on the other hand, too early discharge might be more injurious. It was also admitted that maliciously unjustifiable detentions were quite possible, as any other sort of injustice is possible on the part of persons holding positions of power and responsibility. But reasons were urged by Dr. Parsons, in support of the belief that such malicious detentions were at least very rare; that sentiments of honor and professional pride were strong deterrents, to say nothing of the great danger of detection in the commission of the wrong, and the ease with which patients who were decidedly insane obtained their enlodgment through the intervention of the courts.

Cogent reasons were given why various classes of convalescents ought to remain under asylum care for a period of time after they appeared to be well; as, for instance, when they would be immediately subjected to the exciting cause of their insanity on their return; when the progress toward convalescence had been characterized by relapses, or when dangerous delusions had been entertained and had faded away so gradually that there were difficulties in judging whether they had passed away entirely.

But on the other hand, the discharge of certain uncured curables before they were well was advised, as when after making a certain degree of improvement, this improvement stopped and the patient second to retrograde. It might be safe and highly advisable to discharge some of these patients before they were well.

The major part of the paper was devoted, however, to an advocacy of the discharge from the asylum of harmless incurables, and their return to the care of their friends, or placing them with ordinary families as boarders, and in some sort as members of the families. It was claimed by the reader that however comfortable and happy such patients may appear to be in large asylums, there are many causes of annoyance and discomfort that would not be experienced in ordinary family life; that notwithstanding the fine buildings they occupy, and their freedom from care, they are still prisoners, and exposed to many disagreeable associations and associates.

Quotations were made from Dr. Bucknill and from Dr. Baudsley, strongly supporting these views.

The question was then considered, what classes of incurables might safely and with benefit, be released from asylum restraints. Since in the case of a great majority of such patients, a moderate cost of maintenance would be essential, those only would be adopted who were quiet and would require no especial attendance or supervision. Habits of industry would be favorable.

Whether such patients would do better with their relatives, or with strangers, would depend on the circumstances of the family, the state of health, the surroundings, the feelings or notions of the patients, etc. It would be found, however, that many patients who would not do well with their own kindred, would be happy, contented, and useful with congenial strangers. It would be impossible for the patient to resume his former position and influence in his own family, and hence he would be subjected to irritating restrictions and annoyances there.

As a preliminary measure, a system of legalized furloughs was advocated, to the end that at first the patient might still be under legal restrictions and easily returned to the asylum, if the trial at large should prove a failure.

Properly constituted authorities should make the selection of patients for the trial, with the assistance and under the advice of the asylum superintendent.

The families in which the patients should be placed should be selected with great care. While at first there might be found very few suitable families who would assume the charge, it was thought that, when a beginning had been made, plenty of suitable homes would be offered. Reference was made to the multitude of respectable and responsible families who take summer boarders for a moderate compensation, and the probability that some of these families would prefer one or two permanent patient boarders, to a number of sane boarders for a short season during the busiest portion of the year. A suitable system of visitation and of reports was advocated. The paper closed with the following summary of conclusions, to wit:

1. That, inasmuch as many recoveries take place in asylums for the insane, it is to be expected that some convalescent patients may at any time be found in the wards.

2. That while possibly now and then a convalescent patient may be detained on probation an unnecessary period of time, such cases are not of frequent occurrence, nor important in their consequences when they happen; and that when they do occur the detention is very rarely indeed through criminal intent.

3. That many harmless incurables are unnecessarily detained in asylums for the insane; that these incurables would be happier in the enjoyment of ordinary family life and associations, and that systematic efforts should be made to secure their enrolment and their establishment under family care.

4. That under certain circumstances curable patients should be removed from asylums, restraints, and associations while yet uncured.

Owing to the lateness of the hour, the discussion upon Dr. Parsons' paper was postponed until the next meeting of the society.

MEETING OF THE ADJUNCT MONTGOMERY COUNTY, PA., MEDICAL SOCIETY.

BY DR. JNO. B. CARRELL,

Of Hatboro, Pa.

For the MEDICAL AND SURGICAL REPORTER.

The Society met at the office of the President, Dr. Jno. Paxton, in Jenkintown, on January 11th. The President occupied the chair.

At the last meeting Dr. Coltman, Sr., reported one of his cases in practice in which the antipyretic power of quinine in typhoid fever, etc., was clearly shown. The report of the case can be found in this journal, on page 586, issue of November 24, 1883. The editor of an eclectic journal, styled the *Medical Investigator*, published at Greenfield, Ind., after giving a few of the less important points of the case taken from the REPORTER, says: "Had the case been treated according to the doctrines of his school a recovery would have been the result."

It speaks badly for a man when he must resort to defamation to keep before the public. The Society considers the article of not sufficient importance to merit a reply. It is merely mentioned so that conscientious physicians can read the article and judge of its merits or demerits.

After the usual routine of business, Dr. Mary P. Hallowell read an article on the treatment of phthisis, in which she has collected many good points. (See page 165.) The subject was discussed by the members, and many cases in practice cited to show the utility of the different methods of treatment. The stimulant plan of treatment was fully endorsed. Dr. Cooper uses with great benefit in night-sweats a drink of strong sage tea, and to relieve the local pains, a liniment made of equal parts of alcohol, tinct. camphor, and aque ammon. To relieve the dryness of the throat produced by belladonna, Dr. Carrell combines with it small doses of ipecac, and for the tough tenacious mucus which is difficult for the patient to raise he uses chlorate of potash by steam atomization.

The responsibility of the medical profession in the use of alcoholic liquor was discussed, and Dr. Carrell appointed to read an original essay at the next meeting on its "Use and Abuse as a Medicine."

Dr. Coltman, Sr., read a selected article from the *Southern Practitioner* on "Is Ipecac a Nerve Stimulant?" by Dr. J. H. Green, of Okalona, Mississippi.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, January 10, 1884, the President, Dr. Tyson, in the chair.

Osteo-Myelitis of Tibia.

Exhibited by Dr. C. M. Wilson.

George L., æt. 42, was admitted into the surgical ward of the Pennsylvania Hospital, November 26, 1883. Sixteen days previously he had been knocked down on shipboard, and had sustained a wedge-shaped fracture of the tibia, and an oblique fracture of the fibula of the right leg about the middle. When admitted the fragments were in malposition and partially united. There was considerable deformity, the lower fragment of the tibia being tilted up and overlapping the upper

fragment. By appropriate treatment the fracture was retained in fairly good position, and the case was progressing favorably until the afternoon of December 26, just one month after admission, when he had a severe chill, followed by a temperature of $103\frac{1}{2}^{\circ}$ Fah. He complained of violent pain in left shoulder-joint. He was treated with salicylate of sodium. Next morning his temperature was $102\frac{1}{2}^{\circ}$ F., with intense pain in both shoulders and elbows. The same anti-rheumatic treatment was continued, under the supposition that the case was one of acute articular rheumatism, the man having been exposed to a draught. The afternoon of second day he had a severe chill, with an evening temperature of $104\frac{3}{4}^{\circ}$ F., and a pre-systolic mitral murmur was detected. Dr. Wilson now considered the case to be one of pyæmia, and gave massive doses of quinia, stimuli, and digitalis. Man steadily grew worse, and died of exhaustion on the morning of December 30.

Post-mortem twenty-six hours after death. Rigor mortis marked; body well nourished; posterior portion of body much discolored; extensive ecchymoses over arms and shoulders; smaller patches over abdomen and chest; one and a half ounce of clear serum in the pericardial sac, with many ecchymoses over the surface of the heart; both sides of heart relaxed and partially filled with post-mortem clots; the valves on right side appeared normal; the aortic valves were incompetent, and their free borders were roughened by recent vegetation; there was also some slight thickening and contraction; the mitral valves showed old thickening as well as signs of recent inflammation; the endocardium of the left ventricle showed numerous spots of ecchymoses; the heart weighed sixteen ounces, and its tissue was a good deal softened; spleen normal; left kidney weighed seven ounces, was somewhat swollen, and its tissues were slightly flabby; the capsule was thickened and somewhat adherent; the organ was congested and somewhat swollen; right kidney weighed six ounces, and presented the same appearance as the left; liver was large, swollen, and marked by the ribs; its surface was mottled with rounded yellowish patches, surrounded by dark-red areolar; section showed it to be markedly congested; its weight was four pounds four ounces; lungs much congested; the base of the left being anteriorly bound down by old adhesions. The brain was not examined. Examination of the fracture showed it to be ununited, and there was no callus detectable. The periosteum tore easily. On section the medulla of the cavity of the tibia showed marked evidences of inflammation. There was a puffy septum of granulating tissue between the ends of the fragments. Above there was evidence of extravasated blood, and two and a half inches above the line of fracture there was a small circumscribed medullary abscess. The medullary cavity was inflamed and streaked with red lines. Through the kindness of Prof. Brinton and Dr. Longstreth, Dr. Wilson was enabled to show several pictures illustrative of osteomyelitis. This is the only case of death from a simple fracture recorded at the Pennsylvania Hospital. This disease must be a very rare sequel of simple fracture. It is not necessarily a fatal disease, as the inflammation may become circumscribed, a depot of pus formed, and the destructive processes

end there, or a portion or the whole of a bone may die or be removed. It is easy to see how a virulent inflammation going on to suppuration with no vent to the pus, as in this specimen, could readily give rise to septic poisoning. I am indebted to the courtesy of Dr. Longstreth both for the specimen and assistance in its preparation.

Dr. Tyson said that he had seen many cases of osteomyelitis from gun-shot injuries during the late war, but he could not recall a case where the medullary canal was encroached upon by a condensing osteitis, as in this specimen.

Dr. Nancrede related a case of fatal septic trouble following a simple fracture of the thigh, where the starting-point seemed to him to have been a superficial ulceration of the spine, produced by the adhesive plaster. Possibly section of the bone might have revealed an osteomyelitis, but as the fracture was firmly united, he thought that the skin abrasion was the starting-point, and related two cases of pyæmia produced by equally trivial causes.

Dr. Longstreth related a case seen by him when a resident physician at the Pennsylvania Hospital. The patient had a fracture of the thigh of three weeks' standing, and was apparently doing well, when chills, sweats, lung consolidation, etc., ushered in a fatal attack of pyæmia. A post-mortem revealed osteomyelitis and general pyæmic manifestations. A possible explanation of Dr. Wilson's case was that the man had been on board ship for three weeks after his injury, where the treatment must have been of the crudest description.

Dr. Eskridge called attention to the endocardial trouble found in septic disease, which he had been taught as a student to consider was of an ulcerative form, and of fatal prognostic import. He had, however, seen two cases which presented all the symptoms of ulcerative endocarditis, but which had recovered, while in two others, with a similar clinical history, post-mortem examination revealed only a simple non-ulcerative endocarditis.

Dr. Shakspeare asked whether this condensing osteitis might not have been due to a previous syphilitic trouble.

The Dread of Number Thirteen.

The hold that superstition has on human nature is well illustrated in the following: "*Galigan's Messenger* says the superstitious dread of the French for the number thirteen is well known; and a curious manifestation of that aversion has just been made before the Paris Municipal Council on a question put by M. de Lanessan to the Director of Works. The latter said that applications were being continually received, from owners of houses bearing the No. 13, to have the number changed; the request being supported by the tenants. In the case of a street in which numbers follow and exceed thirteen, the demand is not admitted, as it would necessitate a modification of all the succeeding numbers; but, where the No. 13 was the end of the series, the city, by a sort of toleration, allowed the last house to be numbered 11*bis*; which was the case of the last house at the extremity of the Boulevard du Palais, which gave rise to the question."

EDITORIAL DEPARTMENT.

PERISCOPE.

Catheter Fever.

Sir Andrew Clark read a very interesting paper on this subject before the Medical Society of London (*Lancet* December 22, 1883), which thus concludes:

First, that about middle life in men perfectly healthy, or with no discoverable evidence of disease, except perhaps, and even that not always, a low density of urine, the commencement of the habitual use of the catheter is sometimes followed by fever of the remittent type, which often ends in death, and that for the fatal issue in such cases no adequate structural explanation can be found. Secondly, that it is important that such a fever, arising in the midst of apparent health from such a seemingly small cause, and leading so often (as it certainly does) to a fatal issue, should be well and widely known, lest death should take the friends of the patient by surprise, and arrangements necessary to the welfare of a family should be left unmade. Thirdly, that although it is well known that in persons affected with renal disease, or with chronic gout, or with grave disorders of the general health, the commencement of habitual catheterism is attended with peril to life from secondary fever, the fact that this fever may arise in what seems to be good health, and without the mediation of any visible structural lesion, issue in death, is not well known—or at least well known only to a few—and has, I repeat, no adequate place in English surgical literature or in the English surgical teaching of this time. Of course, this knowledge will be found, as I have in a very imperfect way shown you, in special monographs and papers, but those are the luxuries of the few, and for the most part the luxuries of specialists who work in that direction; but such knowledge should be, as I think, fully imported into our common textbooks, and so made accessible to the whole body of the profession. Fourthly, that this fever is neither distinctly uræmic nor distinctly pyæmic; that although, having some of the characters of each, it has all the necessary characters of neither; that probably it begins in the nervous system; that probably the disturbance of the nervous system reacts in the first instance upon the general metabolism of the body, and in the second instance upon the secretory organs, beginning with the kidney; that the effect upon the kidney may consist either in structural alterations of the kidney, invisible by the aid of our finest instruments of research, or (as seems to me much more probable) in alteration of the constitution of the blood, that dynamic condition of its constituents in the renal vessels essential to the elaborative action of the secretory cells thereof; and lastly, that the concurrence of these conditions may, and often is, enforced by septic reabsorption into the blood. Fifthly, that a more complete knowledge of this variety of fever, and of the conditions of its origin, maintenance, and in-

crease may, at least we may hope, lead to a material diminution of its mortality; and that even now, by treating in a serious manner entrance upon catheter life by taking the precautions set forth by Sir Henry Thompson, by great temperance in the use of foods and stimulants, by rest, warmth, and by other general means, upon which I shall not now dwell, such mortality, I repeat, may be possibly considerably diminished.

Of these propositions, the one at present most open to attack is the fourth, wherein it is asserted that this fever is not distinctive and exclusively uræmic. For in these days it has come to pass that almost every writer of distinction adheres to the view of the uræmic origin and nature of catheter fever, or of the thing known under that and other names, and I am, as it were, left by myself very imperfectly armed to oppose it. I oppose it. I ground my opposition to the exclusively uræmic theory upon the fact that the phenomena of catheter fever, not as they exist at a particular moment, but in their assemblage and in their progress together, are different from those of the ordinarily recognized uræmia. The duration is at once longer and shorter—longer than that of the acute uræmia, and wanting its headache, its perversions of sensation, its changes in the urine, its convulsions, its profound coma; shorter than that of chronic uræmia, wanting its neuralgias, its recurring headaches, its defects of sight, its fleeting paralyses, its itchings of the skin, its vomiting, its characteristic breath, its attacks of dyspnea and palpitations, its painful nervousness, its low temperature. Furthermore, the urine of the catheter fever of this variety, at least of catheter fever, is always loaded with micro-organisms of various kinds; and although it is deficient in urea and contains more or less albumen, it deposits no tube casts and it is capable of amendment. Lastly, whilst chronic uræmia issues in death, catheter fever may issue, sometimes does not issue, in complete recovery. Sir Henry Thompson may remember that I saw with him a distinguished nobleman, not far from Oxford street, who had to make an entrance upon catheter life, and he very justly and wisely warned the relatives that it was a serious procedure, and that perhaps he might suffer constitutional disturbance after the starting of this mode of life; and it happened that he did suffer this constitutional disturbance. It happened indeed that he had a mild variety of this fever which I am now describing, and that it continued for between a fortnight and three weeks. Eventually, with Sir Henry Thompson's help, he recovered, and I think I may say now, five, six, or seven years afterwards, he is in good health at an advanced age. Except in its long duration, in its occasional rigors of great severity, and its exceptional clearness of mind, the phenomena of what is called endocardial fever resemble more nearly those of the fever which I have called for the moment catheter fever, than any other malady with which I am acquainted.

Two questions of a practical kind arise out of

this study of the history of catheter fever. The first is this: seeing that by almost universal assent the fever originates at least in a disturbance of the nervous system, and seeing furthermore that in the cases accessible to me at least, there is no account of the fever following in cases where narcotics or anæsthetics have been used, may it not be that the fever is capable of being cut short by the administration on entering upon habitual catheterism of narcotic or anæsthetic remedies? I remember that my great master, Syme, in Edinburgh, for a reason which his instincts very often knew better than his understanding, invariably gave his patients whom he had to catheterize frequently a grain or two of opium from the very beginning, and I must also add that he was singularly free from catheter accidents. The second question is this: assuming the presence of the fever, and seeing that the quinine has signally failed in controlling it, what are the drugs to be employed on such occasions? and what is the sort of hygienic management to be followed, especially in respect of food and alcohol, which are so variously used on such occasions, in order that the fever may be brought, if that be possible, to a successful ending?

Such, then, are the main conclusions which I have drawn from my fragmentary studies of this form of catheter fever. I know that they are incomplete; I even fear that they may be inaccurate; but, however this may be, I submit them to your consideration, and I console myself with the reflection that they may call forth the ripened experience of practical surgeons, who, in this matter, furnished with a larger knowledge and a more practiced judgment, may be able not only to correct me where I am in error and to confirm me in any small point where I may have caught the truth, but to supply us with the very sort of knowledge which at this juncture we need and ask.

Antiseptic Dressings.

Dr. Robert F. Weir contributes a lengthy article on this subject to the *N. Y. Med. Jour.*, January 19, 1884, from which we take the following:

In the New York Hospital, prior to an operation, not only are the parts washed with soap and water, but also with a mixture of turpentine and alcohol, two ounces to the pint, both as a solvent for greasy matter and likewise as a penetrating antiseptic—turpentine being a germicide even in so weak a solution as one part to seventy-five thousand.

The sponges in our hospital, as in Germany, after proper cleansing, are kept in an antiseptic solution for a week before they are again used. To carry out this plan we have, as can be observed, on a shelf in the amphitheatre, a row of glass jars, seven in number, representing the days of the week. The sponges are, in the first place, prepared in the following manner: After getting rid of the sand by shaking and beating them, they are thoroughly washed in warm—not hot—water, for if hot water is used it deteriorates the quality of the sponge substance and tends to fix the dirt within its meshes. This is particularly so if the sponges have already been used at an operation. The sponge is then placed in a 1 to 1,000 solution of permanganate of potash for

twenty-four hours. If the permanganate is found to be losing its beautiful pink color, a little more may be added. At the end of this time the permanganate of potash is washed out with warm water. The sponges are now bleached by immersion in a solution composed of one part of sulphite of sodium to one hundred parts of water, to which has been added a one-fifth part of a watery solution of hydrochloric or oxalic acid of a strength eight parts to one hundred. They are stirred up with a stick for a few minutes, until they whiten; if left longer, they will become friable. Then they are washed out with water again, and left for some time in running water. The sponges are afterward put into a carbolic-acid solution, 1 to 20, or in a solution of 1 to 1,000 of the bichloride of mercury, and kept there until used. Sponges so prepared, such as we use at this hospital, cost but about one cent and a half each; and at that price they may be thrown away after use at an operation. This is my custom in private practice; at the hospital it is the rule that, if the operation is one upon the rectum, the vagina, or other parts where contamination is likely to take place, the sponges used are afterward destroyed; in amputations and other cleanly operations upon the otherwise healthy subject, the sponges are cleansed for subsequent use. In all abdominal operations new sponges are employed. The sponges that are to be again used are washed thoroughly in running water, and afterward kept for some hours in a weak carbonate-of-soda solution, to dissolve out the fibrin, etc., and then placed in the antiseptic solution as before. Such are the antiseptic dressings used at this hospital in the wounds to which they are applicable; there are certain wounds of the body, as of the mouth, rectum, and elsewhere, in which it is necessary to employ iodoform, which is better adapted to such localities. If you have no other preparation at hand, you can rub the iodoform into the ordinary gauze or simple mosquito-netting, and apply it to the wound. The sticky iodoform gauze is readily made by rubbing iodoform into the ordinary Lister gauze. Iodoform also makes the best application for small lacerated wounds. But remember that more than forty-five grains will give rise to symptoms of poisoning.

Finally, the principle of rest should be carried out thoroughly. No matter how small the operation—as, for instance, the removal of a small tumor from the ankle—the limb is placed in one of the easily-cleaned enameled iron guttered splints of Volkmann's pattern, and held immovable until healing is accomplished or the risk of inflammation has passed away.

Such are the details of the management of wounds and injuries which at the present time seem best to fulfill the conditions demanded by an antiseptic treatment. It is hardly to be expected that the general practitioner will have at his command all the materials here shown. He can, however, have sundry powders of corrosive sublimate, of eight grains each, in his possession, and, when called to a case of injury, can rapidly add a pint of warm water to one of these powders, bathe the wound freely with the solution, dip into it some cheese-cloth, or, what is even better, ordinary absorbent cotton, then squeeze this out as dry as possible, or, if time allows, partially

dry it by exposure to heat, and apply it to the wound. Drainage can always be accomplished with rubber tubing perforated in the ordinary manner, choosing, when possible, the black or red rubber for the purpose. This dressing, duly secured with a bandage dipped in the same solution, will answer for a first application, and permit you to prepare a more elaborate antiseptic appliance if you wish.

After dispassionately reviewing the advantages of antiseptic precautions, he says :

"With such results, I feel that I shall be pardoned for repeating words used on a former occasion, but now employed with a conviction deepened by increased experience, that 'the saving of life which is thus indicated, occurring as it now does, or ought to do over the whole world, should entitle the name of Joseph Lister to outrank in medicine all of his century, not excepting the discoverer of anæsthesia.'"

A New Treatment for Chronic Noises in the Head (Tinnitus Aurium).

Dr. Bernard Roth thus writes in the *Brit. Med. Jour.*, December 15, 1883 :

"In my practice as an orthopædic surgeon, I have, during the last six months, found Dr. Mortimer Granville's 'precise nerve-vibration,' by means of the percuteur, most useful in relieving and curing various neuralgias of the head and back, which are frequently present in cases of lateral curvature of the spine. Holding the opinion that, in some cases, tinnitus aurium is allied to neuralgia, I was induced to try the percuteur in the following case.

"Mrs. S., aged 57, the wife of a professional man, consulted me on October 16, with the following history. She was quite well up to four and a half years ago, when she took scarlet fever, which was followed in a few months by deafness and tinnitus aurium. The patient was never free from the noises, which had become gradually worse till the day of consultation, although the deafness was much less than it used to be. The noises were now so severe that they were felt all over the head, especially at the top of the cranium; and at times the patient was driven quite distracted, and almost out of her mind. She had tried everything during these four years, without even the slightest temporary relief to her distressing symptoms, although she has been treated by leading aurists. The patient described the noises as varying in character, but generally they gave her the impression of iron filings constantly falling. I applied the blunt ivory hammer of the percuteur over the forehead, and then at the top of the head. The vibration was at once very soothing; and in about five minutes more relief was given than the patient had ever received during the whole of the four years. After waiting about ten minutes, the noises, which had not quite disappeared, became worse, but decidedly less violent than before the percuteur was tried. On applying it again, a similar relief was given. Next day, Mrs. S. reported that she was much better till late at night, when the noises became raging again. I reapplied the percuteur on and off for three-quarters of an hour, which gave even more relief than the first day. All noise did not

disappear, but it was so slight that the patient described it as being 'quite a pleasant chink,' and that she would not have noticed it if she had not been thinking about it.

"On October 24, I saw the patient for the seventh and last time. She had experienced so much relief that she decided to buy a percuteur for home use, and she felt it would give her most relief late at night.

"I am aware this is still an incomplete case; but while I am waiting for the patient to report progress, I am anxious that other surgeons more specially engaged in aural practice should try this treatment in similar cases of apparently incurable tinnitus aurium, than which there is scarcely any more distressing affection."

Caffeine.

Dr. Leblond (*La Tribune Med.*, November 18, 1883) thus sums up a series of papers on the physiological and therapeutic properties of this article:

1. Caffeine is an excitant of the nervous and muscular system.

2. It diminishes the frequency of the pulse, increasing the force of the heart-beat and blood-pressure by the vaso-motor constrictors.

3. It lowers the peripheral temperature.

4. It has no influence on the formation of excretion of urea.

Of the poisonous dose:

1. Caffeine exaggerates the excito-motor force of the spinal cord, paralyzes the peripheral sensitive nerves, and diminishes the sensibility of the pneumogastric.

2. It causes a rapid lowering of the blood pressure through paralysis of the vaso-motors.

3. The heart, in cold-blooded animals, beats slower and slower, to be finally stopped in systole; in warm-blooded animals, it becomes quicker at the close and stops in diastole.

4. It produces tetanic contraction of the muscles.

5. It rapidly lowers the temperature.

6. It increases mal-assimilation.

As a therapeutic agent:

1. It is, as a rule, tolerated much better by the system than is digitalis, and by beginning with small doses, there is no fear of the bad effects often produced by the latter.

2. It steadies the heart, increasing its force and slowing its beats.

3. It produces more or less of a diuresis.

4. Not only is it a substitute for digitalis, but it should *always* be administered in serious cases which may result in immediate death, because its action is surer and more prompt than that of digitalis.

5. It is best to administer the caffeine in small broken doses, in potions or subcutaneous injections, and to never begin with a stronger dose than 20 centigrammes, to determine the susceptibility of the patient, then to increase the dose rapidly, if necessary, to from 50 to 75 centigrammes. It is useless to give more than 1. gramme 50.

6. In affections of the heart it should always be administered when, from any cause, the patient's condition requires that the use of digitalis should be stopped or when it is not well tolerated.

7. Caffeine seems to lower the temperature in pyrexia, being useful also in these cases as a heart tonic.

8. It is frequently very beneficial in albuminuria of cardiac or other origin.

9. And finally, in cases of strangulated hernia it seems to act upon the muscular contraction of the intestine.

The Diet in Bright's Disease.

Dr. Charles Purdy thus writes in the *Chicago Med. Jour. and Ex.*, December, 1883; *et passim*:

We would suggest as the diet for the albuminuric patient as follows: In the main it should consist of farinaceous articles, fish, vegetables, and fruits. Meats must be indulged in sparingly; very small quantities of lean meat alone being permissible. Soups should be prohibited; even the conventional beef-tea and beef extracts. Eggs should be excluded from the diet in albuminuria. It has been shown by Lehmann and Stockvis that when the white of an egg is introduced into the circulation, not only does that escape by the kidneys, but a surplus of other albuminoids accompanies it. Senator says the lesson will apply to meat as well as eggs. "Any excess acts in two ways injuriously—by increasing unnecessarily the amount of urea and other waste products in the blood; and also by pouring into the system an overplus of peptones or other albuminous matters, which may simply have to be excreted, and cause irritation in the act." Cheese acts in a similar manner, and should not be used. Vegetables may be used freely, and the only ones to be avoided are the leguminous ones, which are too rich in albumen. Fats may be used as freely as the condition of the stomach will permit. Milk is one of the best articles of diet, but should not be too exclusive, as it does not furnish the elements of diet in a suitable proportion. The stomach should not be overloaded, it being an occasional observation that even in healthy persons albumen appears in the urine after a large meal. Small meals, more frequently repeated than usual, is a good rule to follow in such cases. Great discrimination is necessary in the matter of drinks in Bright's disease. Alcohol in large quantities, especially in concentrated form, is generally believed to be injurious. If alcohol be permitted at all, it must be well diluted, and it is preferable to give it with some alkali or neutral water, as Vichy or Apollinaris water in excess. Alcohol stimulates the interstitial changes in the kidneys if used in quantities, hence the allowance should be very small—not enough to disturb to any extent the general circulation. Claret, sherry, and Marsala are the least objectionable. As to malt liquors, they should, as a rule, be excluded, though it is stated that lighter pale ales or Bavarian beer are nearly free from objectionable qualities.

Salivary Calculi of the Right Sub-Maxillary Gland.

Dr. J. Bradford Cox reports this case in the *Boston M. and S. Jour.*, January 10, 1884:

Mr. J. D., aged fifty-two years, born in Prussia, single, a mechanic, in January, 1879, had an inflammation of the right submaxillary gland, which lasted two or three weeks. The abscess which re-

sulted, instead of breaking externally, notwithstanding poultices to promote it, discharged very freely through Wharton's duct. There was a continuous discharge of pus through that duct until May 29, 1882, when he called at my office for treatment.

An examination showed the gland to be a very little larger than normal, and indurated. Pressure on it caused pus to flow from the outlet of the duct near the frænum linguæ. An ordinary silver probe passed readily along the course of the duct to the gland. The touch revealed either necrosed bone or a calculus, the removal of which I assured him would be necessary before he could recover.

As he had consulted several other physicians, and used various remedies without benefit, he consented to an operation. This consisted in cutting into the gland from the inside of the mouth with an ordinary bistoury, wrapped with a roller bandage except at the point. The end of the probe, passed through Wharton's duct, served as a guide. When the opening was large enough, I introduced a pair of bullet forceps and removed two calculi. The larger is irregular in shape, with a smooth surface on one end; the remainder of the surface is quite rough. It is thirteen millimetres long, eight broad, and seven thick. The smaller is flat shaped, smooth on one side, where it probably rested against the other. There is a similar smooth place on the end of the larger, which corresponds in shape and surface with this. It is rough on the other side and edges. It is seven millimetres long, five broad, and two thick. They are dirty brown in color; the rough projections lighter than the dark background; very hard, having the appearance of brown quartz on the smooth surfaces. Internally the larger one is snowy white. It shows under the microscope an amorphous scaly detritus, many of the fragments having the shape of the epithelium from the mucous membrane of the mouth, but no definite forms of crystallization.

At the time of writing the patient is entirely well. The duct is larger in calibre than normal; and the gland secretes what appears to be healthy saliva, which can be pressed out through the duct.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—The annual address of Dr. H. O. Marcy, President of the Academy of Medicine, which has appeared, treats of the recent advances of sanitary science, and the relations of micro-organisms to disease. It is a carefully prepared paper.

—The "Mid-winter" number of *The Century* is one of unusual interest. The frontispiece, "Head of a Man," by Rembrandt, from a St. Petersburg collection, is an exceedingly fine engraving, and is the subject of an article by Richard Whiting. The illustrations generally are more than usually effective, and are on especially good paper.

We have only space to mention a few of the authors and their articles to show the value of this number: Signor Salvini's "Impressions of Shakespeare's *Lear*," Geo. W. Cable's "Dr. Sevier," and a practical statement of "The Convict Lease System." An interesting little article on Keats, by Stedman, and articles on Dante, by Miss Sarah Freeman Clarke and Christina Rossetti; Titus Munson Coan's sketches of Gustave Corbet, and General Badeau's sketch of General Phil. Sheridan, with a fine engraving of the General. These are a few of the articles of interest. The quality of the articles is superior to their titles, and the number is peculiarly rich in its illustrations.

—*Harper's Monthly* for February is a model number both in text and illustrations; the latter of unusual beauty and delicacy. We can but give the titles of some of the various articles. "The Upper Thames," by Joseph Patton; "The Possibilities of a Revived Industry," by Alfred F. Oakey; "A Winter in Canada," by C. H. Farnam, and the continuation of the serials, "Judith Shakespeare," by William Black, "At Mentone," by Constance Fenimore Woolson, and "Nature's Serial," by E. P. Roe. There is the usual number of poems and shorter articles, with the always valuable "Topics of the Time," and "Open Letters."

—*St. Nicholas*, the prince of magazines for young people, comes each month more and more attractive. The names of the contributors alone are sufficient to assure one of the excellency of the articles it contains. In the January number alone we find Louisa M. Alcott; Rose Hawthorn Lathrop; Julian Lathrop; William O. Stoddard; Mayne Reid, and H. H. Boyesen, with quite a number of lesser lights, making a galaxy of unusual brilliancy.

—*Littell's Living Age* gives every year increased proof of its being fully alive to the demands of the best culture. There is nothing that can take its place as a representative of the choicest literature of the day, and a family without *Littell's* is without one of the most educating of American periodicals.

Our other weekly exchanges are among the best of religious and secular newspapers. The *Independent*; the *Evangelist*; the *Presbyterian Banner*, the oldest Presbyterian newspaper in the country; the *Presbyterian*, and the *Methodist*. Of the family newspapers, the *Germantown Telegraph* always stands first, and the change in ownership and editorial management has added to its vivacity and general tone. The *Vermont Journal* and the *Trenton Gazette* are both papers of much value.

BOOK NOTICES.

Transactions of the American Gynecological Society, vol. 8. For the year 1883. New York. Dr. Appleton & Co., 1884. 8vo., pp. 275.

It will perhaps answer the purpose of a notice of this volume to state what it contains, as the society which issues it, is now so well established that all that it publishes has an acknowledged merit. After the minutes and the President's annual address, which is a biographical sketch of Dr. Nathan Smith, founder of Dartmouth Medical College, we have the following papers: "Superinvolution of the Uterus," by Dr. J. T. Johnson; "Cleanliness in Surgery," by Dr. R. S. Sutton; "Hot Water in Secondary Hemorrhage after Pelvic Operations," by Dr. A. H. Smith; "On Dysmenorrhea," by Dr. C. D. Palmer; "A Rare Form of Abdominal Tumor," by Dr. T. A. Reamy; "A New Mode of Operating for Anal Fistule," by Dr. E. W. Jenks; "Congenital Fissure of the Urethra," by Dr. H. F. Campbell; "Injuries of the Gravid Uterus as Complications of Laparotomy," by Dr. C. C. Lee; "Is the Extirpation of the Cancerous Uterus a Justifiable Operation," by Dr. A. R. Jackson; "On Perineal Laceration," by Dr. T. A. Emmet; "Chronic Abscess of the Pelvis," by Dr. W. H. Byford; "On Ergot," by Dr. G. J. Engelmann; "Rectal Disease in Relation to the Uterus," by Dr. R. B. Marvin.

The volume is very handsomely manufactured, but we miss the bibliography of gynecological literature as prepared for preceding volumes.

A Manual of Practical Hygiene. By Edmund A. Parkes, M. D., F. R. S., etc. Edited by F. de Chaumont, M. D. Sixth edition vol. ii.

Diseases and Injuries of the Horse. By F. O. Kirby. Wm. Wood & Co., New York City.

The above volumes are numbers of Wood's Library of Standard Medical Authors.

Of Parkes' treatise we have already spoken on the occasion of the appearance of the first volume. It is a work of sterling merit, and has been edited with much care. It contains a vast amount of information such as could with difficulty be obtained elsewhere.

The work of Kirby is of less importance. It impresses us as hastily put together, a compilation without judgment, and by one with no practical knowledge of the subject—very much out of place in a pretended "Library of Standard Medical Authors." It is evidently intended to fill a gap at little expense to the publisher and no profit to the purchaser, and is, therefore, and evidently make-shift.

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HEREDITY.

Can we ever hope for the Utopian days when the enigmatical phenomena of heredity will be clearly comprehended?

That heredity is a fact, that form and feature, and oftentimes peculiarities or idiosyncrasies of functions are transmitted from parent to offspring, we all know; but the hidden and intensely interesting points of relation between father and son, or in other words, the whole history of heredity, is as yet a sealed book, destined to reveal most interesting and important facts, when the master mind arises who can unfold them to us.

We are aware that the tendency to certain diseases passes from one generation to another, and we lean very much to the proposition that *all* diseases characterized by change of form or permanency of function of any organ, or organic disease, are capable of transmission from sire to son.

But, and here comes in a most important practical point—we cannot accept hereditary influence as an absolute and single potential factor in the transmission of disease; it would seem rather that we must regard it as the predisposing cause, which by itself is not capable of causing disease, being dependent for the fullness of its mission upon collateral exciting causes; in other words, hereditary tendencies can be obliterated.

For example, let a child inherit a consumptive tendency from a parent who has died of phthisis. If, from early infancy, his life be so guided by intelligent sanitary forethought, that his weak lungs may be protected from the exciting causes of phthisis, if his life be nearly allied to that of his remote roving ancestors, it is very probable that his hereditary weakness will be made strong, that he will escape the disease and that he will in turn transmit the tendency less markedly to his offspring, and so on, through successive generations, until finally the predisposition will become extinct.

Does it not seem reasonable to suppose that acquired tendencies may be transmitted, and that transmitted tendencies may be annihilated?

What is true of consumption is, very likely, true of all organic diseases; and in this lies a

strong argument in favor of a better and more general knowledge of preventive hygiene.

We have a fair knowledge of the exciting causes of organic diseases, and if, as we must logically concede, these exciting causes will act more potently, when a hereditary predisposition exists, then, *pari passu*, must we hold that if these exciting causes are avoided, the hereditary predisposition is greatly robbed of its power.

If our arguments are tenable, it would seem that the majority of cases of organic disease depend for their existence upon two factors: First, hereditary predisposition, and second, the exciting cause. And, further, it would appear that if the exciting cause be withheld, the hereditary tendency will become ultimately annihilated, and if the hereditary predisposition is not transmitted, the exciting cause has lost an ally of no mean significance, and its strength must be greatly increased in order that it may originate the disease.

Here, then, would come in the value of medical family histories. If the public would only sufficiently realize the value of preventive science, they might be induced to keep medical histories of their families, which would tend to throw much light upon the obscure subject of heredity, and would greatly aid the individual who desired to live a long and healthy life.

If each one of our readers had access to the medical histories of the families of his father and his grandfather and his great-grandfather, and so on for generations back, how many light-houses would he not have to warn him off the shores of heredity, and to indicate to him the enemies to health that had come to him from his ancestry.

There are objections to this plan, some great, others trifling. Among the first, stands prominently the almost insurmountable objection, that but few men could be found who would be willing to state on paper that they had contracted syphilis; among the latter, we would be met with the objection that "it was too much trouble."

Therefore we fear that, valuable as such manuscript would prove in the maintenance of health and the promotion of longevity, it cannot be an

accomplished fact, save among the very few who value science and the general welfare above all personal considerations.

Yet we must all concede the value of such histories, and we should, as far as lies in our power, cause those who look to us for advice, to so regard them.

THE EFFECTS OF DISEASED MEATS.

The excitement about the "American hog," will be productive of good results if it forces the owners of stock to take better care of their animals. Instead of talking about making reprisals on France and Germany because they exclude the American pork, it would be more to the purpose to appoint a committee of experts, and prove by their showing that the pork we send abroad does not carry disease with it. Or, if the finding of the committee were to the effect that any considerable proportion of the meat actually is trichinous, or for other cause unfit for food, then certainly we ought not to find fault with our European neighbors for not choosing to be poisoned for the sake of benefiting our pork-packers.

Why has not this simple and inexpensive plan been consistently and steadily pursued? The answer made by the European journals is that we do not dare to have an honest and competent examination of our pork products. They will have a right to say so, until the contrary is shown by our actions.

The reply frequently made to the European charges is that while pork enters largely into our home consumption, cases of trichinosis are more rare here than in Germany, and that epidemics of it, such as have recently been reported in Saxony, are unknown.

On the surface, this is true; but it is also true that trichinosis strongly simulates other diseases, as in its lighter forms muscular rheumatism, and in its graver manifestations typhoid fever, so that it is always possible that many cases pass unrecognized by either patient or physician. We are certainly much less on the alert for its outbreak than are the medical men of Germany.

Another and a more satisfactory explanation of

its rarity in the United States, is the habit of our people to cook their food thoroughly. At country hotels and farm-houses we have almost invariably found the meats "well done," often over-done—roast beef, for example, being exposed to the fire until it was browned through and through. This is a sad infringement of the canons of gastronomy, but it is an excellent prophylactic against tape-worm and trichinæ.

In Germany, on the other hand, smoked ham and bacon are eaten absolutely raw, and in France many meats are persistently underdone to a degree that requires a special education to enjoy them. In the restaurants of Paris and Berlin it is no uncommon thing to see a person order a *bijsteck au naturel* with a *sauce tartare*, which is little else than a piece of absolutely raw beef with a mustard dressing. Of course, any ova or germs which find their habitat in muscular tissue are thus conveyed, active and unchanged, into the congenial nidus of the alimentary canal.

These differences in culinary customs suggest a reason for the greater extension of parasitic disease in Europe than in the United States. Nevertheless our duty and our interest are to put every safeguard against the possibility of injurious entozoa. Experience has demonstrated that cleanliness, proper feeding, and occasional alteratives, will keep stock in entire health; and this should be impressed on stock-raisers by emphatic measures. They have no right, we have no right, to jeopardize the health of a community in order to put a few more pennies in the purse.

THE QUESTION OF WOMEN DOCTORS.

We like to hear and present all sides of the questions which are actively interesting the profession. Hence it gives us pleasure to publish the following comment on a recent editorial in this journal:

DEAR SIR:—It is all very well to advocate the chivalrous sentiments about women doctors, as in your last number. But take my case. I have a wife and children to support, and practice in a village of about 2,000 souls. Recently a woman doctor came here, whose husband has a good position on the railroad. They have no children.

She went to work, and by talking to the ladies, has secured a large share of the best family practice. Is it right that we should encourage those who support no one thus to rob us of our livings? Is this fair to the great body of male physicians?

* * * * *

We acknowledge there is force in this argument; at least, there seems a certain cogency in the reflection that the position assigned woman by the customs of our social life gives her an advantage in the struggle for existence against the stronger sex, handicapped as the latter is by heavy responsibilities. To be sure, we may ask, is not an unmarried man equally free from responsibilities, equally light and girded for the race? But in our profession the fact is well known that it is not easy for an unmarried man to secure family practice, which is precisely the most profitable; while a woman, married or unmarried, has the entrée to families and finds no bar to her reception.

Related to this is the great, the often absurd, modesty of American women. Social custom does not permit them to refer in society to such things as childbirth, which European ladies speak of without the least hesitation. A woman physician can readily take advantage of this, to prejudice her sex against male physicians. We have seen and heard the argument used that all diseases peculiar to women should be treated by women. This would carry with it the children; and without women or children to treat, what would become of most doctors? There is unquestionably a growing sentiment from this cause against male physicians, and it is fostered by the advocates of female physicians. Suppose it increases for a few decades, and suppose the supply of female practitioners is largely increased, as it is likely to be, what will be the result? It can hardly fail to be otherwise than seriously detrimental to the career of medicine as a business for men.

Granting this, is it a proper reason for us to oppose the medical education of women? In some trades which could be successfully prosecuted by women, type-setting for example, the trades unions have felt themselves justified in preventing women from learning the trades, on the ground

that they reduce wages, and thus hinder a man from supporting his family.

The answer to the above question need not concern us. We do not, as a profession, have the power to stop women from becoming doctors, nor can we prevent them getting into practice. To inveigh against them in journals, and to exclude them from medical colleges and medical societies, will not check their inroads. Therefore we may as well receive them with the best grace we can, and shun all appearance of persecution. In the new forms of social life toward which man is drifting, the position of the sexes will be fixed by their relative capacities, and by their respective fitness for certain occupations. We can do little to retard this, nothing to prevent it; and while we sympathize with the writer of the above, and with others in his situation, we do not know of any more comforting words to give than those above written.

THE BOWER AND KEATES CASE.

This celebrated case, which has attracted so much attention in England, is well worthy of imitation the world over.

These two gentlemen were subjected to a most unjust and malicious prosecution for malpractice, the circumstances being such as might happen at any time to any of us. With pride we note that the whole profession of England immediately rushed to their rescue, and subscriptions to the defence fund poured in so rapidly that the demand has been much more than supplied.

In this connection we are pleased to see that a circular has been sent to the profession of this city, under the signature of two of our most eminent surgeons, asking for contributions to reimburse Dr. Forbes for the heavy outlay (\$4,000) he incurred last winter in his defence of the prosecution charging him with complicity in the stealing of bodies from Lebanon Cemetery.

—Rev. R. Heber Newton, in a paper on the "Obligations of Society Towards the Insane," pleads for schools for the special training of nurses for the insane.

NOTES AND COMMENTS.

Extractum Pancreatis in Typhoid Fever.

We all realize that the dietetic treatment of typhoid fever is exceedingly important. Therefore we are prepared to realize the importance of the recommendation made by Dr. Frank C. Wilson in the *American Practitioner* for January 1884, that the milk given to typhoid patients should be first digested with extractum pancreatis. Milk so treated cannot be coagulated by even the strongest acids, its casein being transformed into peptone, and in a condition to be at once absorbed and assimilated. There is noticeable a slight bitterness, to which the patient soon becomes accustomed, so that it is taken readily and produces no discomfort. Even this bitter taste may be avoided by stopping the process of digestion before it is entirely completed. It has been found by experiment that the objectionable taste is only developed when the casein is entirely peptonized. It is scarcely ever necessary to carry the artificial digestion quite so far, and when stopped at any point before completion the taste is perfectly natural. If immediately placed on ice, it can be kept as long as simple undigested milk. The ferment of the pancreatic extract is held in a latent condition, and when taken into the intestinal canal may still further aid in the completion of the digestive process.

To avoid the possibility of the patient becoming tired of the same article of diet day after day, its form of administration may be varied in a number of ways. As the casein is peptonized, and can not be coagulated by even the stronger acids, the milk so prepared can be utilized in making milk punch. This can be flavored with lemon-juice or any other acid desired. Thickened with gelatine, sweetened and flavored, it forms a delicious milk jelly suitable for convalescent patients and grateful to the taste.

During the past two years he has met with many instances in which the use of the pancreatic extract has yielded the most gratifying results. Not alone in typhoid fever is it useful, but in all instances where the digestion is enfeebled, or where it is interfered with by the presence of ulcerated or inflamed surfaces, the process of peptonizing the food will be found of service. In rectal alimentation its importance is manifest, the food so prepared being readily absorbed and appropriated without inconvenience or irritation. He has sustained patients with gastric ulcer entirely by nutrient enemata twelve or fourteen

days. In this time the ulcer will be entirely healed, so as to allow the cautious administration of peptonized milk in gradually increasing quantity, until a full meal can be taken.

Antiseptic Inhalations in Phthisis.

This method of treatment is not particularly new, but its use has been deprecated by many, on the grounds which are noted by Dr. I. Burney Yeo in the *Brit. Med. Jour.*, January 12, 1884, as follows:

"Two objections have been made to the use of antiseptic inhalations, which are in singular opposition one to the other.

"The first is, that the vapors given off from the fluid which we drop on the sponge of the respirator are so strong and irritating, that they excite inflammation of the pulmonary tissues, and thus do injury; indeed, I have seen the antiseptic treatment of phthisis referred to in a medical journal as 'homicidal.'

"The other objection does not accuse of homicide, but is content with pointing out that we are very foolish people to imagine that any useful or appreciable amount of our antiseptic substances reaches the lung at all! I do not know which of these objections is least in accordance with experience.

"With regard to the first objection, I can state most positively that I have never seen any symptoms of irritation set up by antiseptic inhalations when properly applied. With sensitive persons, it is desirable to begin by at first dropping a very few drops of the inhalant on to the sponge, and slowly increasing the quantity; by that means, you will avoid all risk of irritation.

"The second objection scarcely needs answering at all; to some extent, it is a resurrection of the old dispute as to the use of topical remedies (in the form of vapors and sprays) to the respiratory surface, which was agitated fiercely many years ago, and the affirmative view thoroughly established by most elaborate and careful experiments by a number of observers in every country in Europe. The dispute and its results are fully related by Oertel in the work already referred to, and also by Dr. Solis Cohen, of Philadelphia, in his work 'On Inhalations.'"

He has had good results, and after reading his paper, we would feel inclined to give a trial to the inhalation of a weak solution of corrosive sublimate, say 1 to 2000 or 2500, by means of a steam atomizing apparatus. *New Surg. Reporter*

Diagnosis and Pathology of Dermoid Cysts of the Ovaries.

In answer to a question, Dr. Gannett (*Boston M. and S. Jour.*, January 17, 1884), stated that if hair is found the diagnosis is easy enough; it is difficult to get hair through the exploring needle, but fat comes, and this is diagnostic, particularly in the region of the ovary.

As to the pathology, it was originally supposed,

fifty years or more ago, that dermoid cysts represented the results of an ovarian pregnancy; and where such tumors were found post mortem in unmarried women, serious aspersions were raised against the moral character of the individual. But as later similar tumors were found in young children before the age of puberty, and further in the male testicle, it became obvious that some new theory of their origin was necessary.

In later years they have been thought to be congenital; that during foetal life a portion of embryonic tissue remained in the ovary, and later developed into a dermoid cyst.

Recently Waldeyer has advanced the idea that as any ovarian epithelial cell may become an ovum, so any such cell may develop into one of these tumors.

Dr. Gannett mentioned the fact of the association of dermoid cysts with other tumors of the ovary, he having observed two cases of combination of sarcoma with dermoids, and three cases of dermoid cyst in connection with well-marked cystomata.

On School Hygiene.

This was the subject of an address before the American Health Association, at its last meeting, by Dr. Charles J. Lundy, of Detroit. He sums up tersely as follows what is required to remedy existing defects:

1. Avoid the cramming process in education, and the nervous excitement due to the spirit of rivalry.
2. Reduce the number of subjects in the curriculum, and shorten the periods of study.
3. Ventilate the school-rooms in accordance with the most approved methods.
4. Regulate the temperature of the school-room—an atmosphere which is too warm debilitates the system.
5. Provide properly constructed and arranged seats and desks.
6. Instruct pupils to sit erect, and to hold the book or paper at least twelve inches from the eye.
7. Provide highly myopic pupils with proper spectacles, which will enable them to read at the natural distance of twelve inches.
8. Furnish pupils with well-printed books.
9. Furnish abundance of light, without producing glare. Let it come from the left side if the room is narrow, from both sides if the room is wide.
10. Provide for the physical education of school children, and teach them the importance of outdoor exercise.

Bromethyl in Childbirth.

The investigations of the effect of bromethyl in childbirth have demonstrated that we possess in any of the ethyls of bromine a remedy of the greatest value in the delivery of women. Its greatest advantage seems to consist in the fact of its causing local anæsthesia without loss of consciousness. Recently Dr. l'Parnemann (*Allg. Med. Centr. Zeit.*, No. 86, 1883,) has instituted a series of researches, which appear to prove definitely, that under the influence of bromethyl the labor generally progresses more regularly, the single contraction of the uterus endures longer and is more powerful, that the frequency of the pulse suffers no alteration, and that there is perfect local anæsthesia.

There is another benefit which we seem to derive from this remedy in childbirth, viz., the rapidity of its effect. The writer quoted has established the fact that usually, at the first inhalation of the drug, about ten deep inspirations are sufficient to establish local anæsthesia, while during the later inhalations two deep inspirations mostly answer their purpose, to make the labor painless.

The delivery may be concluded by the application of the forceps, and even the latter causes almost no expression of pain. The patients were conscious during the whole time, yet totally free from pain, and in no case have been noted disagreeable consequences.

Another Case of Long-Retained Pessary.

Of interest in connection with the case we recently reported, we note that Herbert Renshaw relates (*Brit. Med. Jour.*) the case of a lady, aged 55, who consulted him complaining of severe pain in the back and legs, and unpleasant vaginal discharge. She also was obliged to pass her motions in the upright position, owing to the intense pain caused by any attempt to relieve the bowels in a sitting posture. On examination a smooth raised fleshy ridge was found, running from before backward, on each side of the vagina, terminating before and behind in a rough semi-circular ridge. Fourteen years previously the patient suffered from a troublesome bearing down. She consulted a "wise woman," who introduced a ring, and asserted that it would never require to be removed. For many years she obtained great benefit from this support. The ring was removed by shelling it out from the fleshy overgrowth, by picking through with the finger-nail. Half an hour after the operation, all her pains disappeared. There was incontinence of urine, and no fecal matter in

the vaginal discharge. From the mineral earthy deposit on the surface, it appeared to have been coated with lime-salts.

The Benignity of Venereal Disease.

One of our English exchanges states that in a return made to the House of Commons in 1877, No. 260, it is mentioned that in English work-houses in twenty counties there were but forty-one cases of venereal disease, and in twenty-nine counties there had been only seven deaths from the disease. "The deaths from syphilis at all ages among paupers, including infants, children, and adults, were only eight per million, which was not quite one in one hundred thousand, and among the general population not more than one in one hundred and twenty thousand."

With regard to the benignity of modern cases of syphilis, Dr. Taylor quotes Fournier that "in ninety-five per cent. of all cases of true syphilis met with, the disease is truly benign," and Lancereaux, who says: "It should be known that this disease becomes dissipated in a great number of cases after the cessation of the cutaneous eruption, and sometimes even with the primary lesion."

Prolonged Gestation.

Is it possible? can gestation extend for a longer period than that usually accorded to it? There are many distinguished men who consider that it is impossible, and look upon all such cases, as due to errors in calculation.

The following case, however, which Dr. Ballard reports in the *Brit. Med. Jour.*, January 12, 1884, seems so conclusive as to hardly admit of question. He says:

"I have just attended a girl, aged 16½ years, the duration of whose pregnancy was 306 days, or 44 weeks with the exception of two days. I have been very careful to guard myself from error with regard to this case, and I believe it may be accepted with every confidence as a reliable contribution to the statistics on this subject. The pregnancy was the result of a single intercourse. The labor was short and easy for a primipara, and the child quite within the average as to size."

Trichinosis.

At the last quarterly meeting of the Illinois State Board of Health, three outbreaks of trichinosis—one of them resulting in three deaths—were reported, the first during the early part of November, in a family near Gardner, Grundy

county; the second and third during December, in Woodburn, Macoupin county, and in Bloomington, respectively. The Gardner and Bloomington cases resulted from eating uncooked pork and sausage, and the Woodburn cases from raw smoked sausage. Specimens of the meat from Gardner and Woodburn were sent to the secretary for examination, the character of the disease being only suspected, until the microscope showed, in one case, about 2,000, and in the other, about 8,000 trichinæ to the cubic inch.

More About Jequirity.

To the Ottawa Medico-Chirurgical Society, Dr. Prevost communicated the results of some experiments with "*Jequirity*" in the treatment of granular lid, exhibiting some samples of the drug. It is especially indicated in cases of trachoma, where pannus is a marked symptom. Eight beans are placed in four ounces of cold water, and four ounces of hot water added. The granulations are painted with the solution, and the patient told to wash the lids every day, allowing a small amount to penetrate beneath the lids. It acts as an irritant, causing an œdema and purulent discharge in some cases. When these acute symptoms subside, the eye is found to be free from the troublesome disease. He had used it in several cases with success.

Perspiration in Albuminuria.

Dr. Janssen (*Deutsch Archiv. f. Klin. Med.*) finds that nephritic patients constantly lose large quantities of watery vapor from the skin, but no regularity can be observed in the quantity. Œdematous parts of the body lose more water than non-œdematous parts. Less water is lost by perspiration in acute nephritis, and possibly also in nephritis with contracted kidney. The proportion differs in different individuals suffering from nephritis with enlarged kidneys; they sometimes lose more, and sometimes less, than healthy patients. No regularity could be found in the excretion of carbonic acid by the skin in nephritic patients.

Alcohol vs. Strychnia.

As the result of a recent discussion before the French Society of Temperance, it would seem that while strychnia will control the functional, it has no effect on the organic influences of alcohol, so to speak. In other words, if a person under the influence of alcohol is strychnized, he will not appear to be drunk, but all the same will the results of alcohol, such as cirrhosis of the liver, become manifest.

SPECIAL REPORT.

NO. XV.—OPHTHALMOLOGY.*

BY C. S. TURNBULL, M. D.,

Oculist to the German Hospital, Philadelphia.

(Continued from page 158.)

Case of Tuberculosis of the Iris. Wiener. Med. Bl., No. 24, and Sitz. Ber. d' Gez. d' Aerzte, p. 750.

In a girl of twelve, Arlt saw the iris of the right eye densely covered with grayish, non-vascular nodules, presenting the characteristic appearance of tubercles, and filling the whole anterior chamber. Vision proportionately diminished. Examination of lungs shows tuberculosis beyond a doubt. Hereditary predisposition.

Tubercule Primitive de l' Iris et du Corps Vitri. Soc. de Chir., séance, 14 Juin, 1882, Union Med., No. 83.

Poncet made a similar observation in a person of sixteen without any hereditary predisposition, and with healthy lungs. No syphilis. Tuberculosis of the iris and anterior portion of the vitreous. The author thinks the latter is not rare, and agrees with Trelat and Perrin in advising the removal of an eye with tuberculosis of the iris, so long as other organs are not affected. An enucleation for tubercles of the choroid should only be performed when there is inflammatory reaction or danger of infection of the surrounding parts.

Primary Tubercle of the Iris. Trans. of the Ophth. Soc. of the Unit. Kingd., vol. ii., p. 259.

Swanzy excised the eye of a girl two years old; five months later the child was in good health. Marked tubercular family history. Microscope confirmed diagnosis. S. discusses the case with reference to the inoculation or infection theory.

On Genuine Tuberculosis of the Vitreous in Man. Deutschman frequently found pure tuberculosis of the vitreous in rabbits, without any of the choroid and retina, after injection of tuberculosis matter. The author also found, in a case of amaurosis of a man, due to iridochoroiditis, by microscopic examination, that it had been preceded by localized tuberculosis of the vitreous, the other membranes of the eye not being affected.

Case of Pure Gumma of the Iris. 5 Lustren Ophth. Wirksamkeit., p. 133. Wiesbaden: Bergmann.

Mooren had an opportunity to examine microscopically a pure gumma of the iris in a young man of nineteen, in whom syphilitic antecedents could not be traced. He found besides the char-

* From the Progress of Ophthalmology During the Second and Third Quarter of the Year 1882, by H. Magnus, of Breslau, and Others.—*Archiv. Ophthal.*, vol. xii., No. 1.

acteristic structure, great masses of pigment in form of lumps, generally lying together in heaps, but not enclosed in cells.

Among two thousand and sixty-eight cases of iritis, the same author observed one hundred and sixty-nine of pure syphilitic iritis. If, after a regular iridectomy in chronic irido-choroiditis, symptoms of irritation are observed, which combined with marked distension of the blood-vessels threaten closure of the pupil, he would diagnose syphilis with certainty.

Scollamento dell'Iride. Bell. d'Ocul., vol. v., No. 1, September, 1882.

Moyne. Two cases of traumatic irido-dialysis in two boys twelve years old. The first healed by iridesis, with $V=1$; in the other, the lens also was injured, but successfully extracted. Double vision was not found in either patient.

Iridermia. Path. Soc. of Dublin. British Med. Journ., May 6, 1882, p. 663. Benson exhibited at the Pathological Society of Dublin the right eye of a boy æt. ten. Globe enlarged. Cornea clear. Lens subluxated and opaque, with here and there calcareous patches. Iris entirely absent, except a small sector above, which was adherent to lens capsule. Lesions probably due to intra-uterine irido-choroiditis. Iris of left eye normal.

Case of Sarcoma of the Choroid. Archiv. Ophthal. vol. x., p. 269. Arch. f. Augenheilk., vol. xi. 3, p. 323. Ayers observed a melano-sarcoma of traumatic origin. The microscope showed active proliferation of the cells by division, and considerable thickening of the walls of the blood-vessels—the latter probably the result of proliferation of the adventitia and the perivascular tissue of the blood-vessels.

Melano-sarcome de la Chorioide. Ann. de la Soc. de Med., d'Anvers, May-June, 1882. Le Roy. In this case also the sarcoma seemed to be of traumatic origin. Later a relapse occurred in the orbital tissue, making exenteration of the orbit necessary.

The Etiology of Hydrophthalmus. C. f. D., vol. vi., p. 225. The case of Mayerhausen was one of congenital hydrophthalmus, whose further development coincided with the beginning of dentition; it gradually attained considerable dimensions, while at intervals inflammatory attacks of an exquisitely glaucomatous character set in, and finally led to nodular deposits on the anterior surface of the corneal epithelium. The size of the globe was reduced and vision improved by the use of eserine, as in an analogous case of Bergmeister (Wien. Med. Presse, 1881, No. 30).

Alcune Considerazioni sulla Etiologia del Glaucoma. Quadristat e frammenti d. Oftal., Roma, 1882. As regards the etiology of glaucoma, Angelucci seeks its primary cause in the sclerosis of the arteries, giving rise to stasis in the veins and 'consecutive exudation in the venous walls. The closure of the perivascular lymph-ducts by the swollen veins is of greater consequence than the closure of Fontana's canal.

On Eserine and Pilocarpine in Glaucoma, and Eserine in Ocular Neuralgia. Snell is satisfied that eserine is of use not only in acute, but also in chronic glaucoma. Its action is not so certain in the latter, but still it sometimes not only produces an improvement in the vision, but also arrests the progress of the disease. He records a case of acute glaucoma where iridectomy was declined, and not having any eserine at hand, he ordered pilocarpine "discs." The same evening the patient was much relieved of pain, and a few days later the attack passed off. He has found eserine of great use in cases of ocular neuralgia, unattended with increased ocular tension. To avoid the danger attending the use of atropine in eyes with a tendency to glaucoma, Streatfield proposes the introduction into the British Pharmacopœia of a much weaker solution in addition to the present one. He believes the present scare about the artificial production of glaucoma by use of mydriatics to be much exaggerated, but it ought to be better known that a very weak solution suffices for the production of mydriasis.

On a Case of Sympathetic Ophthalmia. Ophth. Hos. Rep., vol. x., August, 1882, p. 322.

Critchett. A man received a gunshot wound in the right eye in the ciliary region. Palliative treatment at Provincial Hospital for a fortnight, then admitted into St. Mary's Hospital under Mr. Anderson Critchett. O. S. appeared to be perfectly healthy, and V. normal. O. D. enucleated. Patient discharged six days afterward, with caution regarding use of O. S. Fifteen days later, exactly one month after injury, noticed slight indistinctness of vision, which gradually increased. Eye became red and painful. About five months later was readmitted to the hospital. Well-marked sympathetic ophthalmia, with + T2. Iridectomy performed with improvement of V. C. refers to opinion which was held by ophthalmologists up to a recent period, namely, that when an injured globe was removed before any evidence of irritation could be noticed in the other eye, complete freedom from sympathetic ophthalmia might be confidently predicted. This doctrine, as he remarks, has received a rude shock from the recent

observations of Mr. Nettleship. The practical inference is, that a short delay may be fraught with danger, and that an emphatic decision should, if possible, be at once arrived at as to the necessity which exists for removal of the injured eye.

On the Transmission of Sympathetic Affections. Five Lustra of Ophthalm. Practice. Wiesbaden., Bergmann, 1882, p. 143.

Mooren believes that the sympathetic irritation is transmitted through the ciliary nerves and optic nerve, especially through the agency of the vaso-motor system. No definite date for the time of its beginning can be given, though the inflammation may set in before the time generally accepted, *i. e.*, the fifth week. In only three cases did Mooren see sympathetic neuritis or neuro-retinitis resp. develop after timely enucleation.

Distribution de la Cataracte dans la Région Lyonnaise. Assoc. Franc. pour l'Avancement des Science. Sess. de 1882, à la Rochelle. Progr. Med., Sept., 1882; Gaz. d' Ophth., vol. x., 1882.

In regard to the distribution of cataract in the neighborhood of Lyons, Gayet reports that they occur in about the ratio of 2 to 1,000. They are less frequent in women than in men. Senile cataract develops in the latter at forty-four, in the former at forty-nine. Cataract is more common—more than 3 to 1,000—where glass-blowing and metallurgy is carried on, a fact which he ascribes to the radiating heat. The number of peasants with cataract is comparatively large.

Gliomatous Infiltration of the Lens. Archiv. Ophthal. vol. x., p. 275. Arch. f. Augenh. u. O., vol. xi., 3, 327, with an illustration.

Ayers found in a glioma of the retina (fr. Arch., f. Augenh. u. O., vol. x., p. 325), that the glioma-cells extended on one side of the ciliary body, canalis petiti, along the whole length of the suspensory ligament to the lens-capsule, had penetrated the latter, and entered the lens itself.

On the New Formation of Bone in the Lens-Capsule. loc. cit., vol. x., p. 275. Arch. f. Augenh. u. O., vol. xi., 3, p. 327.

The same writer found in a case of new formation of bone in the lens-capsule, that the cortex had entirely disappeared, and had been replaced by bony tissue. Ossification begun in the layers of the lens parallel to the stratum of connective tissue near the capsule. The latter had about its normal convexity.

Preliminary Iridectomy in Extraction of Cataract. Brit. Med. Journ., September 2, 1882, p. 424.

For the last six years Hodges always performs preliminary iridectomy before extraction, is very well satisfied with the results, and considers its

chief advantages to be the freedom of the anterior chamber from blood after extraction, and the information obtained by the operator as to how the patient bears narcosis.

Cataract Operations at the Clinic of V. Arlt, from 1874 to 1881. Wien., Med. Wochenschr., Nos. 16-18.

Schneidler has prepared the statistics of the cataract operations performed at the clinic of v. Arlt from 1874 to 1881. 1,547 peripheric extractions were performed in 1,460 persons. Good results were obtained in 91.2 per cent.; dubious in 6.44 per cent.; and loss in 2 per cent. The statistics of the accidents, of the operations and of the course of healing are very interesting.

Glioma of the Retina. N. Y. Med. Jour., June, 1882, p. 633.

Agnew observed a glioma of the retina, or rather gliomatous degeneration of the whole eye, in a boy of six months, which necessitated enucleation. One and a half years later glioma of the other eye, which was also enucleated. Nine years later, no relapse.

On Glioma of the Retina. Arch. f. Augenh. u. O., vol. xi., p. 413.

According to Vetsch, glioma occurred in the Zurich ophthalmic clinic in 0.03 per cent. of all cases (in Berlin 0.05 per cent.) Report of twenty-four cases, with special regard to their termination. Both sexes are afflicted to the same extent, neither is there any difference in the side. Congenital glioma was observed in three cases, in each unilateral; in the first and second years it occurs twice as often as in the next six years put together. In regard to its cause nothing definite could be determined. A particular new and characteristic symptom, observed in seven cases, or 32 per cent., was megalocornea, which must be referred to increased tension. In nine cases no operation was performed; death ensued in these on and after sixteen months. Of thirteen who were operated on, five lived, eight died. In five cases there was a relapse in the orbit, in one with scleral perforation in the parotid after three years, in another, after the same length of time, in the eye. Two were cured (no relapse after seven and nine years respectively). In recent cases the microscope revealed, besides round cells, a number of cells with two and more offsets of various length, which Schultze has shown to be normal components of the granular and intergranular layers.

On Visual Disturbances after Loss of Blood. Deutsche Med. Wochenschr., No. 28, and Beitschr. f. klin. Med., vol. v., No. 2. In a woman of twenty-eight, Horstmann observed, four days after

abortion with profuse metrorrhagia, visual disturbances and concentric limitation of the field of vision, under the semblance of a slight neuroretinitis. He could observe its development from the very beginning. It terminated leaving sight slightly impaired, and an insignificant concentric limitation of the field of vision. He then gives a short historical sketch of visual disturbances after loss of blood, observed up to date. In almost all cases there was a more or less marked opacity of the optic nerve and the retina, or atrophic discoloration of the optic nerve. Sight was gained in only the rarest cases; the rule is lasting total amaurosis, or at least a high degree of amblyopia. In a few cases, one eye only was affected. He also reports visual disturbances after epistaxis, hemorrhage from the urethral mucous membrane, and after blood-letting, besides after bleeding from the digestive and genital organs. Nothing definite is known as yet as to the connection between the cause and effect.

Case of Cysticercus Cellulose in the Vitreous, Arch. f. Augenheilk., vol. xi., p. 396. Haase discovered a cysticercus in the right eye of a young man of twenty-one, upward and inward from the papilla, which entered the vitreous in the course of a few days. The parasite, which measured 17 mm. in length, escaped spontaneously through a meridional incision of the sclera, according to Graefe, 8-10 mm. long, with only slight loss of vitreous. No reaction. Vision was reduced to recognizing the motion of the hand at 2 to 3 feet. The author observed five cases of cysticercus among thirty thousand patients in Hamburg, two of which being sub-conjunctival, were easily extracted, while an operation was refused in a sub-retinal one, and another in the vitreous. Three years later, the latter had not yet destroyed the eye.

Epicritical Remarks on Operating for Cysticercus. V. Graefe's Arch. f. Ophth., vol. xxviii. 1, p. 187.

Graefe reports the results of twenty-four cases of extraction of cysticercus according to his method, in sixteen of which, by the smooth removal of the parasite, a perfect result was obtained as far as vision and other conditions were concerned. In eight cases in which the operation failed, the cysticercus lay either perfectly bare in the vitreous, with great freedom of motion, or it was surrounded by a number of membranous envelopes. He describes in detail the position and location of the parasites, the sub-retinal and those situated in the vitreous, the fixed and the movable. The last-mentioned are least suited for an operation. The sub-retinal ones are also difficult of removal, and the determination of their exact location pre-

vious to the operation is of the greatest importance. Graefe constructed a localizing ophthalmoscope for this purpose.

Un Caso Gozzo Esoftalmico. (Grave's disease). Osserv. Ottalm. Ann. Univ. di Med., No. 261, 1882.

Rampoldi observed a bilateral case of Graves' disease, in which exophthalmus did not develop until fifteen years after the swelling of the thyroid gland (on the left the size of a hen's egg) on the right of the head of a fœtus. Marked bruit over the heart and arch of the aorta. Graef's lid-symptom could only be detected when the patient rapidly looked downward. Vision normal, no arterial pulse in the fundus. The degree of exophthalmus is not given, but the lids could be closed. Rampoldi notes as a peculiarity a large number of pityriasis-spots upon the breast of this patient, as also of another, which extended to the abdomen.

Case of Metastatic Chlorosarcoma. Berl. Klin., Wochenschr., No. 33, 1882.

Behring and Wicherkiewicz describes a very rare case of metastatic chlorosarcoma, which was first noticed in the orbit of the right eye of an otherwise healthy young man of twenty-eight, caused exophthalmus, and was accompanied by choked disc of both eyes. Metastatic proliferation went on very rapidly, when vision diminished proportionately. The ophthalmoscope revealed, besides the characteristic symptoms of optic neuritis, peculiar dark striated thickenings of the retinal blood-vessels, whose origin was first ascribed to rupture, but proved to be neoplastic infiltrations of the walls of the blood-vessels. Two months later death ensued, after the patient had become completely blind, and severe cerebral symptoms had developed. The tissue of the neoplasm was found to consist almost entirely of round cells, somewhat larger than white blood-corpuscles, with large nuclei staining intensely; besides there were short spindle-shaped elements with similar nuclei, filled with numerous fat-granules. The cause of the bright green color which the sections of all these tumors presented, could not be determined either by microscopic or micro-chemical examination. The high percentage of chlorine in all parts of the tumors was very remarkable, and their green color may be fairly brought into connection with this. The tumor probably had originated in the sphenoid cavity, and had then proliferated into the nasal and orbital cavities, and into the right medial cerebral fossa.

Various Affections of the Eye, their Pathology and Treatment. Brit. Med. Journ., p. 811, March, 1882.

Mackuna considers that the cornea in small-pox becomes more frequently affected during the stage of scabbing, from the twelfth to the fourteenth day of the eruption, when the patient is getting over the secondary fever, as is associated with the formation of furunculous abscesses in other parts of the body in severe confluent cases. Constitutional treatment is one of the utmost importance in these cases. Locally he applies lint soaked in a lotion of belladonna, with sulphate of copper and tepid water. In the case of children, and some persons who find it hard to keep their eyes at rest, and also to prevent scratching, M. speaks in favor of Cellini's eye-protectors. These are zinc plates made of the same size as the eyelids, and fixed by means of an elastic band.

Hemeralopia in Affections of the Liver. Le Prog. Med., No. 23.

According to Cornillon, hemeralopia occurs in all kinds of affections of the liver, and probably is due to the icterus accompanying them. He reports three cases of simple hypertrophy of the liver, and of cirrhosis in the hypertrophic and atrophic stage. In each hemeralopia was at first but temporary, but later became persistent; once improvement after a diet of raw ox-liver (?). An ophthalmoscopic examination was only made in the first case, when a high degree of venous hyperæmia and arterial anæmia, combined with papillary œdema, was observed. V. and color-perception normal in good illumination.

CORRESPONDENCE.

The Responsibility of Drunkenness.

EDS. MED. AND SURG. REPORTER:—

The causes of drunkenness are two—exciting and predisposing. The exciting cause is the licensed public sale of the various compounds of alcohol; and the predisposing is a propensity inherited from parent or grandparent. The appetite is, therefore, either acquired or inherited. The laws of the federal, State, and municipal governments, from motives of revenue, offer every temptation to make drunkards, and to craze and madden citizens with every licensed allurement to drunkenness; but heartlessly refuse to admit the slightest excuse in extenuation of the violent acts of the drunkard's frenzied desperation. Some readily become drunkards, while others, however great the temptation, never become such. Governments cruelly tempt the drunkard's propensity to drink in order to get money by a license, and without either recognizing or appreciating it, spend twice the amount of money obtained by a license-law to sell the compounds of alcohol, to punish the drunkard for his mentally irresponsible acts, and to remedy the crime and pauperism that directly follow his yielding to the temptation which the

law proffers him:—thus suggesting that the responsibility of the toleration and perpetuation of drunkenness rests not upon those who *are* drunkards, but upon those who *are not* drunkards, and who have delegated to them, the right and power to make and repeal laws. Drunkards soon poison themselves unto death, but those who are not drunkards live after them and know the remedy.

Legislative duty indicates that the primary object of civil government is to foster the morality, vigor, and prosperity of the citizen, as a good parent cares for the welfare of his child. And can it be a judicious act of legislation, either federal, State, or municipal, that will, for the sake of gain from a license to sell intoxicating liquors, tolerate and perpetuate a temptation that leads to the crime, disease, and death of the citizen? It is a part of criminal law that the accessory to a crime is as guilty as the perpetrator; and if a government tempts the drunkard to indulge his propensity to drink by making such temptation a mere matter of license and revenue, and the drunkard, because of such temptation, drinks and makes himself insane, and commits murder, is not the government an accessory? The State tries and hangs the drunkard-murderer, and thereby presents the example of an accessory to crime turning judge and executioner of a criminal in whose act it was the prime tempter, leaving a fact showing the relation between the tempter and the tempted—the accessory and principal to crime. Legislative enactments have made it a seeming necessity to license an inducement to drunkenness, in order to get money to carry on the expenses of the government; and drunkenness will be assured so long as the people permit legislatures to legalize the public sale of the compounds of alcohol.

J. B. JOHNSON, M. D.

Washington City, D. C.

How to Take a Pill.

EDS. MED. AND SURG. REPORTER:—

The experience of W. S. Way, of the *Middletown Transcript*, Delaware, "taking a pill," suggests to me the probability that a plan I have used for several years with success, may be new to some readers of the REPORTER. Having noticed that if a person at meals inclined the head backwards, as in laughing, while there was food in the mouth, they were pretty certain to be strangled from "the food going the wrong way," I instructed those of my patients who had difficulty to swallow pills, to *keep* the head in the position they would if eating and swallowing food at the table—that is, the head inclined forward, the chin near the breast—and *keep* it in that position. If a small portion of saliva be on hand, or a small quantity of water taken after the pill is put in the mouth, it will surprise the patient and gratify the doctor to witness the facility with which it will be swallowed. To direct the patient to keep his eyes on his toes, I have found a help to keep the head in the proper position. SAMUEL E. WILLS, M. D.

Earlville, Cecil county, Md.

—A cremation society has been organized in Boston, and it is said that authority will soon be asked for to establish a crematory in the vicinity.

NEWS AND MISCELLANY.

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service, October 1, 1883, to December 31, 1883.

Bailhache, P. H., surgeon. Relieved from duty at Cape Charles Quarantine Station, October 13, 1883. Detailed as member of Board to examine candidates for promotion, October 30, 1883. Granted leave of absence for thirty days, November 27, 1883.

Hutton, W. H. H., surgeon. Granted leave of absence for twenty days, October 1, 1883.

Wyman, Walter, surgeon. Detailed as member of Board to examine candidates for promotion, October 30, 1883. To proceed to Norfolk, Va., to investigate the conduct of the service at that port, December 31, 1883.

Long, W. H., surgeon. Leave of absence extended ten days, October 26, 1883.

Murray, R. D., surgeon. To proceed to Ship Island Quarantine Station, October 17, 1883. To inspect sites for quarantine stations, November 30, 1883. Granted leave of absence for twenty days, December 18, 1883.

Smith, Henry, surgeon. Granted leave of absence for twenty-five days on account of sickness, October 13, 1883. Relieved from duty at Norfolk, Va., October 17, 1883. To report to Surgeon Sawtelle, at New York, for temporary duty, November 27, 1883. Relieved from temporary duty at New York, and placed on waiting orders, December 31, 1883.

Fisher, J. C., Passed Assistant Surgeon. When relieved by Assistant Surgeon Banks to proceed to New York for duty, October 29, 1883. Granted leave of absence for thirty days, November 28, 1883.

Goldsborough, C. B., Passed Assistant Surgeon. Granted leaves of absence for thirty-two days on account of sickness, October 12, October 20, and November 1, 1883.

Irwin, Fairfax, Passed Assistant Surgeon. To proceed to Norfolk, Va., and assume charge of the service, relieving Assistant Surgeon Glennan, October 16, 1883.

Mead, F. W., Passed Assistant Surgeon. To proceed to Portland, Oregon, inspect the service, and report the condition of Assistant Surgeon Devan, December 5, 1883. Return to station, Port Townsend, Washington Territory, December 18, 1883.

Cook, H. P., Passed Assistant Surgeon. To proceed to Charleston, S. C., for duty, November 27, 1883.

Banks, C. E., Assistant Surgeon. Detailed for temporary duty at Georgetown, D. C., October 11, 1883. Granted leave of absence for thirty days, October 12, 1883.

Bennett, P. H., Assistant Surgeon. Placed on waiting orders, December 15, 1883. Granted leave of absence for thirty days, December 22, 1883. Upon expiration of leave of absence to proceed to Detroit, Michigan, for duty, December 29, 1883.

Peckham, C. T., Assistant Surgeon. To proceed to Wilmington, N. C., and assume charge of the service, relieving Passed Assistant Surgeon Irwin, October 16, 1883.

Devan, S. C., Assistant Surgeon. Granted leaves of absence for ninety-five days, on account of injury and sickness resulting therefrom, November 15, December 5 and 22, 1883.

Bevan, A. D., Assistant Surgeon. To proceed to Portland, Oregon, and assume charge of the service, December 29, 1883.

Glennan, A. H., Assistant Surgeon. To proceed to New Orleans, La., for duty, October 17, 1883.

Wadlin, Eugene, Assistant Surgeon. To proceed to Mobile, Ala., for temporary duty, October 11, 1883. To proceed to Galveston, Texas, for temporary duty, November 17, 1883.

PROMOTIONS.

Benson, J. A., Passed Assistant Surgeon. Promoted and appointed Passed Assistant Surgeon by the Secretary of the Treasury, from October 1, 1883, October 4, 1883.

Banks, C. E., Passed Assistant Surgeon. Promoted and appointed Passed Assistant Surgeon, by the Secretary of the Treasury, from November 1, 1883, November 6, 1883.

Beer Drinking.

From *Good Health* we learn that the president of the Connecticut Mutual Life Insurance Company has for years been investigating the relation of beer drinking to longevity. His object was that he might solve the problem whether beer promotes vitality or otherwise; in other words, to know whether beer-drinkers are desirable risks to a life insurance company. We give his conclusions. He declared, as the result of a series of observations carried on among a selected group of persons who were habitual drinkers of beer, that although for two or three years there was nothing remarkable, yet presently death began to strike, and then the mortality became astounding and uniform in its manifestations. There was no mistaking it; the history was almost invariable; robust, apparent health, full muscles, a fair outside, increasing weight, florid faces; then a touch of cold, or a sniff of malaria, and instantly some acute disease, with almost invariable typhoid symptoms, was in violent action, and ten days or less ended it.

It was as if the system had been kept fair on the outside, while within it was eaten to the shell; and at the first touch of disease there was utter collapse; every fiber was poisoned and weak. And this, in its main features, varying in degree, has been his observation in beer-drinking everywhere. It is peculiarly deceptive at first; it is thoroughly destructive at the last.

Dangers to the Public Health from the Erection of High Apartment Houses.

Dr. Vanderpool told the New York County Medical Society that the sanitary objections to these enormously high buildings affected both the inmates of them and the occupants of adjoining property. Among those affecting the inmates were the impossibility of complete isolation in case of the outbreak of contagious disease, the cutting off of the first three floors from sunlight, and the danger of miasm being conducted to the upper floors by means of the air-shafts employed for ventilation. Among the dangers to the occu-

pants of neighboring property were the rendering of the streets damp and unhealthy by excluding the sun from them, and the establishment of new currents of air, which were liable to cause smoky chimneys and interfere with the sewer ventilation of houses of the ordinary height.

Gas from Sawdust.

An excellent use has been found for the enormous quantity of sawdust annually made in the lumber regions of our country. From the *Popular Science News* for February, 1884, we learn that illuminating gas is made from it. Any kind of sawdust can be used; but that from resinous woods is preferable, and affords a larger yield of gas. From twenty thousand to thirty thousand cubic feet of gas are obtained from a net ton of fuel. The wood-gas has the advantage of containing no sulphur, is more easily purified than coal-gas, and is said to be fully as good, while it is less expensive. The ordinary burners are used for wood-gas. Mill-owners can construct chemical works to make their own gas.

Adulterations.

The question has been often asked whether the adulteration of food articles is injurious to health, and it is gratifying to note in an article by Dr. William K. Newton, read before the American Public Health Association, "that the simple articles in every-day use are never adulterated with injurious substances, and the evidence thus far offered indorses the statement made in the first part of this paper, that adulteration is a sin against the pocket, and extremely rarely against health."

Death of Dr. Reichert.

Dr. Reichert, late Professor of Anatomy in the University of Berlin, died recently at the age of seventy-three. He was appointed to the professorship in 1858, on the death of Johannes Müller, when the Chair of Anatomy and Physiology, held by that distinguished physiologist, was divided; the department of physiology being assigned to Dr. DuBois-Reymond. A few months ago Dr. Reichert retired from his chair, and was succeeded by Dr. Waldeyer, of Strasburg.

Philadelphia Neurological Society.

This Society was organized on Monday, January 28, 1884, when the following officers were elected: *President*.—Dr. S. Weir Mitchell.

Vice Presidents.—Drs. C. K. Mills and T. N. Kerlin.

Secretary and Treasurer.—Dr. James Hendrie Lloyd.

Council.—Drs. S. Preston Jones, Wharton Sinkler, and J. T. Eskridge.

A Reception to Professor Parvin.

The Alumni Association of the Jefferson Medical College gave a reception in honor of Professor Theophilus Parvin, M. D., LL. D., on Monday evening, January 28, 1884, at the St. George Hotel, Philadelphia. A large number of representative medical gentlemen were present.

The Influence of Pavements in Disease.

We note from the *Lyon Med.* that a condition of oedema of the legs has appeared among workmen in the factories since the removal of wooden floors. Bricks seem to make the least injurious pavement, asphalt the worst, and, in order, come cement and stone.

Bismarck and His Medical Attendant.

The *Med. Record* says that Bismarck has made his medical attendant, Dr. Schweninger, a "Professor" unattached. He has no lectures to deliver, students to teach, or chair to occupy, but is simply Professor of the Anatomy, Physiology, and Pathology of Bismarck.

Personal.

—On the evening of January 28, a very pleasant reception was given by the physicians of Philadelphia to Dr. Theophilus Parvin, the recently elected Professor of Obstetrics of the Jefferson Medical College.

Items.

—According to the *Deutsche Medicinal Zeitung*, the widow of Prof. Ball, who is a daughter of Traube, has been made a doctor of medicine in Rome.

—Prof. H. Newall Martin, of the Johns Hopkins University, of Baltimore, has been appointed the next Croonian lecturer of the Royal Society of London.

—In the *Maryland Med. Jour.*, January 19, 1884, Dr. Latimer relates a case of puerperal convulsions cured by hypodermic injections of veratrum viride.

—"Boss, hab you got any dem confound confortic pills?" "Yes. Do you want them plain or coated?" "Dunno. I want dem ones dat's whitewashed." He got 'em.

—The British Medical Association object to the compulsory notification of infectious diseases by the physician, preferring to have this obligation placed upon the householder.

—The palace of the ex-Empress Eugenie at Marseilles, which she was obliged to give back to the city, has been turned into a medical school for the training of army medical officers and others.

—Sixty bushels of pamphlets, advertising a patent medicine, were received in the Boston post office recently, and were found, on examination, to contain also a circular advertising a Kansas lottery.

—The laws of Kansas do not allow the prescription of liquors by physicians except under circumstances of extreme need, and the physician has to take the risk of a jury's deciding against him on this point.

—A curious suit has been entered for trial in Washington. A gentleman there has sued his family physician, asking \$1,000 damages, for malpractice, the cause being that the latter failed to prevent the spread of a contagious disease in the family.

—The Regents of the University of the State of New York, on January 11, 1884, refused to grant a charter to the United States College of Medicine and Surgery of New York City.

—The Swedish Government intend to establish a botanico-physiological station in the north of Sweden, for the study of the flora and the diseases of the crops in that part of the country.

—Mr. Huxley says the body is a machine of the nature of an army, each cell is a soldier, each organ a brigade, the central nervous system headquarters and field telegraph, the alimentary and circulating system the commissariat.

—According to the *Med. Times and Gaz.*, Dr. Wilson Fox has publicly recanted his views as to the communicability of tubercle by inoculation, holding now the view of Koch and the German school, that it can only be produced from tubercle.

—Dr. Arning, late assistant to Professor Neisser, of Breslau, has been sent to Honolulu, in order to study the pathology of leprosy, and especially to investigate the question of the rôle played by the bacillus of leprosy in causing the disease.

—A case of death from the inhalation of ether occurred at a clinic at Bellevue Hospital recently. The patient was a boy with apparently sound lungs and heart. He was under ether for about an hour and a half, when he suddenly ceased to breathe, and all efforts at resuscitation failed.

—The *Jour. de Med. de Paris* says that decoction of quassia, applied to mosquito bites, constitutes an excellent remedy for the relief of the itching and irritation. When applied to the exposed portions of the body, it is also a preservative against the attacks of these very disagreeable and annoying insects.

—The *American Druggist* says that an Indiana court granted a divorce upon the prayer of a woman, the wife of a physician doing a large and lucrative business, based upon his refusal to give up his night practice. The presiding judge praised the progressive liberality of the laws which permitted the release.

—The wife of a postmaster at Serampore, India, a Brahmin lady of good social position, has recently entered the Woman's Medical College in this city, with a view to fit herself for aiding in the elevation of her sex in her own land. By such an act she violates the regulations of caste, and suffers social ostracism.

—The amount of carbonic acid generated by lights is thus represented: Electric lights, none; argand gas-burner, .46; flat-flame petroleum, .95; colza-oil light, 1; paraffine candle, 1.22, and tallow candle, 1.45. It has been remarked that the tallow candle, the oldest of these artificial lights, is not only the hottest, but the most unhealthy.

—The *American Journal of Otology* reports the following: "A doctor of extensive practice suffered from a crackling noise every night just after going to bed. He happened to mention his sufferings to one of his lady patients, who told him of a case she knew where the noise was found to be due to maggots in the pillow. The doctor examined his own pillow when he got home and found plenty of maggots, the pillow having gone far toward decay. A new pillow cured him."

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

Will you kindly give information as to the better way by which the odor of iodoform may be disguised? Tonka bean is not effectual.

R. A. R.

Mass.

EDS. MED. AND SURG. REP.

How do you reconcile your first answer to T. J. H., in December 29th number of *REPORTER*, with Art. I.—Duties of the Profession to the Public, Sec. I.—"also be ever ready to give counsel to the public, etc., etc., on subjects of medical police, etc., etc.," Sec. III, Ib. "Professional brotherhood and certain public duties referred to in the first section, etc., should always be recognized as presenting valid claims for gratuitous services."

How your second answer, with "Duties of physicians to each other, and to the profession at large," Art. I., Sec. III., Dr. T. J. H. referred in his query to a hand-bill posted outside of the physician's office, on the public square, at the bottom of a stairway leading to same.

T. J. H.

Ans.—1. We do not understand the words of the Code to imply that a physician should give gratuitous advice to any corporate body, municipality, or public board. They are able, and they should be willing, to pay for the time and counsel of a medical man, just as they would for the time and counsel of a lawyer. The "public" referred to is the general public, not organized official bodies.

2. Posting a notice that a physician has pure vaccine virus, said notice being on his office, or on the door leading to his office, does not seem to us indecorous or irregular. We must even confess that to our mind putting such a notice in the newspapers, if it was plainly and properly worded, would not be amiss, and would do more good than harm.

MARRIAGES.

DETWILER—THOMAS.—In Milford, N. J., January 2, 1884, by the Rev. Isaac M. Patterson, assisted by Rev. P. O. Studdiford, of Lambertville, T. Craig Detwiler, M. D., of Williamsport, Pa., and Frances, daughter of Edward Thomas, Esq., of Milford.

EWING—BAXTER.—By the Rev. A. Donaldson, D. D., December 20, 1883, Dr. C. M. Ewing and Miss Artie Baxter, both of Olivet, Armstrong county, Pa.

HETRICK—EDWARDS.—At the residence of the bride's father, December 25, 1883, Dr. J. S. Hetrick, of Venedocia, Van Wert county, O., and Miss Kate Edwards, of Pomeroy, Ohio.

PALMER—CALDWELL.—At the residence of Mr. Wm. R. Fox, Louisville, Ky., January 3, 1884, Dr. Marshall Key Palmer, of Lebanon, Ky., and Miss Ella Caldwell, of Danville, Ky.

SCHWENK—VAN CAMP.—In Philadelphia, on the 25th of December, 1883, by the Rev. N. I. Rubinkam, Dr. C. S. Schwenk and Miss Annie L. Van Camp, of Trenton.

MELHORN—RICE.—At the residence of the bride's parents, Camden, Indiana, on New Year's Eve, by the Rev. D. H. Snowden, M. D., Dr. D. H. Melhorn, of New Chester, Pa., and Miss Minerva Rosalie Rice, only daughter of Col. Rice.

CLARK—SWIFT.—In Eugene City, Oregon, on Christmas Eve, 1883, by the Rev. E. R. Geary, Dr. Edward Geary Clark and Frankie Swift.

LOUTHAN—BURROWS.—At Cherokee, Ia., December 13, 1883, by the Rev. J. B. Chase, J. M. Louthan, M. D., and Miss Louie Burrows.

DEATHS.

MERRILL.—In Boston, Mass., January 14, 1884, Dr. John W. Merrill, Jr., son of Rev. J. W. Merrill, D. D., aged thirty-four years.

MRAVLAV.—At Elizabeth, N. J., January 25, 1884, Lucy Allen G. Mravlag, M. D., wife of Victor Mravlag, M. D.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

PROOF THAT HUMAN MILK CONTAINS ONLY ABOUT ONE PER CENT. OF CASEIN; WITH REMARKS UPON INFANT FEEDING.

BY ARTHUR V. MEIGS, M. D.,

Physician to the Pennsylvania Hospital and Children's
Hospital, of Philadelphia.

Read before the Philadelphia County Medical Society.

You must give me your indulgence for bringing before you a subject necessarily somewhat dry in its details, but its great importance must be my justification. Nearly two years ago, I had the pleasure of reading here a paper upon "Milk Analysis," when I described the method I had worked out, and briefly detailed my results. The main conclusion was that human milk never contains more than about one per cent. of casein, and this observation I then claimed to be a new one, and very important, as showing how we should feed infants so unfortunate as to be deprived of their natural sustenance. A year or more ago, I delivered a lecture to the class at the Pennsylvania Hospital, which was subsequently published in the *Medical News* of November 4, 1882, in which I described a plan of feeding deduced from the results of numerous experiments and analyses. This evening, I wish, first, to offer proof that the results arrived at by the method of analysis are correct, and, second, to make some suggestions about the proper method of infant feeding.

Although many chemists have made analyses of human milk, and a great variety of divergent re-

sults have been attained by different methods, there has as yet been no proof offered of the correctness of any of them. This constitutes an important missing link in any attempt to place the question of the composition of milk upon a settled basis; and if a method of analysis is ever devised that will give results which shall be universally accepted, and stand the test of time, the accuracy and correctness of the method must be susceptible of proof—simple, scientific, and incontrovertible proof. Some proof of the correctness of the analyses described here two years ago will now be attempted.

No one disputes that in ether, chemists have a perfect solvent for fat, which, when properly applied in milk analysis, extracts it all. The fat when separated can be seen, and the eye tells positively that it is fat.

With regard to the water, it is equally certain that by the evaporation process its amount can be accurately estimated. This statement is made with the knowledge that there may be with the water some slight traces of other fluids—alcohol, for instance, and perhaps other volatile liquids; but these must be in such minute quantity that they need not be taken into consideration, and for the present the liquid portion of milk may be spoken of as the water. It is equally certain that in incineration, properly performed, there exists an easy and correct method of determining the amount of inorganic matter. In the future, of course, there may be perfected some way of estimating the salts in milk, by extracting from the liquid milk, or from the solid residue left after evaporation, and this may show them to exist in larger quantity than the present method of incin-

eration leads to believe; but the possible error introduced in this way must be very small, and does not invalidate the general facts stated. That the existing estimates of the water, fat, and inorganic matter are correct, is further proved by the fact that there is no difference of opinion in regard to their amounts. Examination of the analyses of different chemists shows an almost exact uniformity of conclusion with regard to the relative quantities of the above-mentioned substances.

When the estimates of the casein and sugar, however, are considered, the widest divergence of view is discovered in the conclusions as to the amounts existing in human milk. In regard to cows' milk, chemists all arrive at nearly uniform conclusions. The casein in human milk is estimated by Dolan and Wood, in one of their analyses, at 7.005 per cent., Vernois and Becquerel give it as 3.924 per cent., and Henri and Chevalier as 1.52 per cent., while my own experiments lead me to conclude that there is about 1 per cent. Now the fact is a striking one, that if in any of these analyses the sugar and casein amounts be added together, the sums are found to be in each instance nearly the same. The subjoined table shows this to be the case.

	Vernois and Becquerel.	Simon . . .	Henri and Chevalier.	Dolan and Wood . .	Haidlen . .	L'Héritier .	Doyère . .	Clemm . .	Tidy . . .	Meigs . . .	Payen . . .	Quevenne .	Regnault . .
Casein	3.924	3.43	1.52	7.005	3.1	1.30	.85	3.533	3.533	1.046	.215	1.05	3.9
Sugar	4.364	4.82	6.50	1.921	4.3	7.80	7.31	4.118	4.624	7.407	8.805	7.31	4.9
Total	8.288	8.25	8.02	8.926	7.4	9.10	8.16	7.651	8.157	8.453	9.020	8.36	8.8

The estimates of Haidlen, L'Héritier, Doyère, and Clemm, are taken from a table in the *Physiologische Chemie* of Gornp-Besanez; those of Vernois and Becquerel, Payen and Regnault, are taken from one in the *Traité de Chimie Pathologique* par Becquerel et Rodier; but the others are from the original sources. A complete estimate of all the constituents is not attempted in the analysis of Quevenne; and under the head which is called casein in the table is included albumen (*matière albumineuse précipitée par l'alcool*); under that of sugar are included also extractive matters (*lactine et matières extractives*).

The table also shows that, in each instance where the casein amount is large, the sugar is small; and *vice versa*—that where the casein amount is small, that of sugar is large.

It has been already said that as regards the analysis of human milk, all observers are agreed as to the proportions of the water, fat, and ash; it is now further evident, from the table, that all agree as to the quantities of casein and sugar taken collectively, and that only when the separation of the two is attempted does there exist any difference of opinion. The separation of the casein from the sugar, therefore, is the difficult part of milk analysis, for in regard to this alone

is there any difference of opinion. In this portion of milk analysis, then, is reached the stumbling block; and it alone requires any explanation, for the rest is universally conceded, and cannot, therefore, but be considered as already placed upon a scientifically exact basis.

There are but two possible explanations of the different results arrived at by various investigators; one, that human milk is as variable a substance in regard to the amounts of casein and sugar contained, as the different analyses would lead to believe; and the other, that the methods of the majority of chemists have been faulty and their conclusions incorrect. That the second of these two explanations is the correct one, does not admit of doubt. Wanklyn says that cows' milk is a substance exhibiting great uniformity of composition, and what he says of cows' milk is also probably true of human milk. There is no reason to expect that it would vary so much in regard to the proportions of casein and sugar, when cows' milk exhibits such uniformity of composition in these respects. It may, by analogy, be fairly argued that human milk is very unlikely to be so variable as published analyses would seem to show. The proof of this, however, lies

in showing, by examination of a large number of specimens, that human milk always contains a large amount of sugar (say 7 per cent.), and therefore by exclusion it cannot contain the great amount of casein it is usually credited with, for all observers agree as to the sum of the amounts of the two substances.

The existence of this large amount of sugar in human milk I have endeavored to demonstrate by experimenting as to how much could be obtained in the crystalline form from any fixed quantity, and then, by applying the same process to cows' milk, to find out whether an equal or, as should be the case if my already published original an-

alyses are correct, only a less quantity of sugar will take the crystalline form.

An experiment was made as follows: 10 cc. of human milk, which had already, by the process described in my previous paper, been found to contain 7.224 per cent. of sugar, was, as usual, agitated with ether and alcohol, and the fat removed. After the removal of the fat the remaining portion was carefully washed into a dish, and in the water-bath, at a temperature of 70° to 80° C., evaporated until only about 10 cc. of fluid remained; upon this was poured a mixture of 25 cc. of water with 25 cc. of alcohol, and the whole allowed to stand over night. By morning a precipitate had formed and settled to the bottom of the vessel; this was thrown upon a filter and washed with a mixture of equal parts of boiling alcohol and water. The filtrate was again reduced in the water-bath, at a temperature of 70° to 80° C., to about 10 cc., and then 75 cc. of absolute alcohol added. This caused again the formation of a slight precipitate, which was allowed to thoroughly settle to the bottom, when the perfectly clear fluid above was poured off into a dish, care being taken that none of the precipitate passed over with the clear fluid. This liquid was allowed to evaporate, without heat, in an open dish of known weight, and there remained finally only crystalline milk-sugar, with a very minute amount of the inorganic material. The 10 cc. of milk thus treated, yielded 659 milligrammes of sugar dry at 100° C. This milk had been previously ascertained to contain 738 milligrammes of sugar to each 10 cc., which made its percentage of sugar 7.224, as already stated. These figures are sufficiently nearly parallel to prove the point, for by the method of crystallization described, it was not expected that all the sugar present would be obtained in the crystalline form, some of it being necessarily precipitated with the casein in the course of the manipulations with alcohol; but only to obtain it pure, and in sufficient quantity to prove that the sugar existed in the milk in the large quantity shown by the analysis, and therefore necessarily by exclusion, the existence of only the small amount of casein. The demonstration thus obtained seems incontrovertible, for when the existence of the large amount of sugar is shown, it follows as a necessary corollary that there can be only the small amount of casein, and therefore the existence of the small amount of casein in human milk is proved.

As a means of further proving that the sugar obtained by crystallization, as described, was en-

tirely free from any traces of casein, it was tested for me by Mr. J. K. Hecker, the apothecary of the Pennsylvania Hospital, by the Nessler test described by Wanklyn and Chapman (*Water Analysis*, by J. Alfred Wanklyn and Ernest Theophron Chapman, London, 1876, p. 25). This test decomposes the casein and forms ammonia from the nitrogen. When the crystalline sugar was subjected to its action, it showed it to be practically free from casein.

Cows' milk, when subjected to the same process of precipitation of the casein by alcohol, after the removal of the fat, yielded only about 4 or 5 per cent. of crystalline sugar. The manipulations were not carried out with the care that was taken when human milk was examined, for there is no dispute as to the amount of sugar in cows' milk; the experiment was therefore made merely to afford confirmatory evidence of what was shown by that upon the human milk. For if only a little more than 4 per cent. of sugar existed in human milk, as is claimed by Vernois and Becquerel, and others, and this being the quantity universally conceded to exist in cow's milk, then when both were subjected to the action of the same reagents, the same amount only of crystalline sugar should be yielded. This, however, was not the case.

One of the strongest proofs of the correctness of the estimates of fat in milk is afforded by the fact that after it has been separated, it can be seen, and the eye tells that it is fat. When sugar is crystallized, and can be seen and felt, and examined with the microscope or a magnifying-glass, and the characteristically shaped crystals of milk-sugar are seen, the fact that it is sugar, and nothing else, becomes self-evident.

To test still further the accuracy of the method described in my former paper upon milk analysis, I carefully analyzed a specimen of human milk, and found it contained the different proximate constituents in about the usual quantities. Then I separated from a further portion of the milk, taken at the same time and under exactly parallel circumstances, fresh portions of the casein and sugar, which I gave to Mr. Hecker, to test their purity; the sugar to be subjected to the Nessler test, to discover if it contained any casein, and the casein to be subjected to the action of Fehling's test, to find whether or not it was free from all traces of sugar. The casein entirely failed to produce any effect upon the copper solution, thus showing that it was free from sugar, while if a small portion of the sugar was added to the solution, the characteristic reduction of the

copper at once took place. When the sugar was subjected to the Nessler test, .05 grammes being introduced into the retort when the decomposing materials were ready, it almost entirely failed to react, showing no more change than would be accounted for by the distilled water which had been used to prepare the sugar. This distilled water must have contained traces of organic matter, for when it was subjected to the test, it showed slight traces of ammonia. The test is so delicate, that it is only by the greatest care and nicety in preparing the materials that they can be had perfectly free from all nitrogenized materials. The conclusion was that the sugars—both that prepared by the ordinary process advised for analytic purposes, and that obtained by crystallization—were, practically speaking, free from casein.

If, then, it has been shown that human milk contains approximately 87.1 per cent. of water, 4.2 per cent. of fat, 7.4 per cent. of sugar and 0.1 per cent. of inorganic matter, the proof that it contains, not 3 or 4 per cent. of casein, as is commonly taught, but only about 1 per cent., is complete.

It may seem bold to make statements directly contradictory of the correctness of many of the usually accepted standards, but it is done with the full knowledge that it is liable to contradiction. There is an article on "Infant Foods," by Prof. Albert R. Leeds, in the *Transactions of the College of Physicians*, third series, vol. vi., Philadelphia, 1883, in which he gives results quite different from my own; but as he gives no account of the methods he pursued, any criticism of his results is at the present time impossible.

In the endeavor to find a food which shall be the best for infants who have to be hand-fed, there are two considerations, either of which might be selected as the basis from which to start. In the first place, the desired goal might be attained by making trial of all sorts of foods; and these being put to the test of experience, the good would be retained and the bad gradually weeded out, until at last perhaps the most suitable would be found, and slowly introduced. On the other hand, the desired end might be attained by trying to produce a food which should be, as nearly as possible, like what nature has provided for the infant. Many trials have been made in the past by both these methods, but to the second one justice has never been done; for, if my conclusions are correct, a proper understanding of the composition of human milk, from which to start, has been wanting.

A clear understanding being now had of its proximate constituents, and the proportions in which they exist, it is possible more intelligently to set about finding how the same elements may be had, and mixed together to make an artificial food like human milk. Cow's milk is almost universally the basis of the foods used, in this country at least.

The artificial food which I shall presently recommend is the outcome of a study of the subject from both of the standpoints suggested, and its advantages are demonstrable. Upon theoretical grounds, it is what a food for infants should be; for analysis of human milk and cows' milk has shown what is their composition, and in the artificial food the elements have been introduced in the same proportions as they exist in human milk. Experience has for many years past been tending in the direction of proving such a food to be what is needed; for, while almost innumerable manufactured infant foods of every variety have been introduced, and have often for a time been thought all that could be desired, they have all, one after another, fallen into disuse and been forgotten; but the use of cows' milk continues to hold its own, and in civilized countries is employed ten times more than all the manufactured foods together. The question, however, remains of how to use it, and the various methods suggested have been almost as numerous as the physicians who have advised them. For a long time the great majority of writers upon infant diseases and diet have recommended that cows' milk should be diluted before giving it to young infants; and this, they all agree, is because it contains too much casein, which causes a curd that only infants of the strongest digestion can with safety assimilate.

The weight of testimony that cows' milk contains much more casein than human milk, is so great that it is astonishing how almost universally the analyses of human milk of Vernois and Becquerel, and of those who have arrived at like conclusions, have been accepted and given credence, despite the fact that the evidence of the senses of every one who has examined into the matter is diametrically opposed to such acceptance. Although, as already said, the weight of authority has long been in favor of the use of diluted milk, still there have always been those who recommended it to be used pure. Of later years more and more has been said and written upon the advantages to be derived from the use of cream, or diluted cream. Dr. J. Forsyth Meigs, who was a well-known authority upon the com-

plaints of children, for years used with great success a mixture of equal parts of milk, cream, lime-water, and a weak arrowroot-water, with a little sugar. Cream mixed with whey, to increase the sugar and lessen the amount of casein, has been recommended. Biedert (*Virchow's Archiv*, Band 60, 1874,) has written an article, and concludes that the best food is cream and water, one part to four, with fifteen grammes of milk-sugar to the half litre of the mixture, the strength of this to be gradually increased. Biedert made many experiments comparing the relative coagulability of human and cows' milk, and again the digestibility of the coagulum; as can therefore be presupposed, his experiments turned mainly upon the two kinds of casein and their differences. He concludes that "there are two important points in which human and cows' milk are unlike: first, in the different amounts of casein contained; and second, in the absolute chemical differences of the two sorts of casein. The first of these considerations would be of but little importance, however, if the analyses which place the average of casein in human milk at four per cent. are correct; its importance, on the other hand, would be very great if it usually contains—as I, in agreement with Vierordt's view, believe—only from two to two and one-half per cent. I think many further analyses are necessary to establish absolutely this point. Even if this view is accepted, however, dilution of cows' milk with equal or more parts of water is not sufficient to remove the differences. It is well known that such a dilution does not remove all the disadvantages which arise in the use of cows' milk, and my clinical experience has taught me that even dilution with two parts of water does not attain the desired end; and the explanation of this positive irremovable difference is to be found in the important chemical differences which exist, the casein of cows' milk coagulating so much more easily, and the coagulum being so much more firm than is the case with the casein of human milk; and, on the other hand, the coagulum being so much more difficult of solution or digestion.

"Until we succeed in actually making the casein of cows' milk identical with that of human milk, it will be necessary to give infants only so much of it as they can digest (no matter how great the necessary dilution may be), and to make up to them with carbo-hydrates (fat and milk-sugar), the lack of albuminates in the food." He further says: "After numerous experiments, I have come to the conclusion that the amount of cow casein which an infant's food should contain

is one per cent. The fat and sugar in cows' milk appear to be as easily digested, and in no wise different from those contained in human milk. If, therefore, one-eighth of a litre of sweet cream (which, according to Hoppe, contains nine and one-half per cent. of fat, three per cent. of sugar, and four per cent. of casein) is diluted with three-eighths of a litre of water, which has been previously boiled, and milk-sugar is added in the proportion of fifteen grammes to the half litre, the desired cream mixture is produced, and contains one per cent. of casein, 2.4 per cent. of fat, and 3.6 per cent. of milk-sugar, which will be found, under all circumstances, to be well borne, and is a sufficiently nourishing food." The greatest part of Biedert's admirable article consists of a detail of experiments made of treating cows' and human milk, and the caseins obtained from both sorts, with a variety of reagents, and observing the different relative effects produced. His conclusion is that "the pure casein of human milk is, in both its physical and chemical nature, different from that of cows' milk." The casein of cows' milk, when isolated, has always an acid reaction; while, on the contrary, that obtained from human milk is always alkaline. If human casein is treated in a certain way with acid, there is produced an "acid modification of human casein," which has many points of resemblance with ordinary cow casein; on the other hand, by treating cow casein with alkali, a substance is produced which shows, with many reagents, identically the same changes that are, by like treatment, produced in human milk. After careful examination of these two substances, however, Biedert concludes that "cow casein treated with alkali is, in many respects, much more like human casein than the original cow casein, yet it always shows unmistakable differences." Although he makes a strong case, and there are many reasons in favor of accepting his conclusions, yet, in the present state of knowledge of casein, the difference cannot be considered as absolutely demonstrated.

(To be continued.)

A CASE OF FRACTURE OF FEMUR, WITH EXCESSIVE LACERATION OF THIGH, TREATED SUCCESSFULLY, WITH POSSIBLY SOME NOVEL FEATURES.

BY GEORGE W. JOHNSON, M. D.

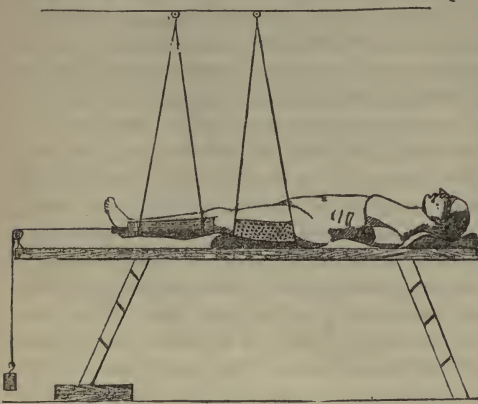
Of Savanna, Ills.

Acting as surgeon of the C. M. and St. P. R. R.,
I was called November 3, 1883, to attend a case of

railroad injury, in the person of Edward P., a robust man about 25 years of age,

I learned the following particulars of the accident. On attempting to make a coupling, his foot was caught by the guard-rail, and he was thrown in such a manner that the left thigh lay across the track, about its middle; a signal being quickly given, the engineer reversed the engine, which brought the train, which was backing and moving slowly, to so sudden a stop that but one wheel passed over the leg, but the reversal suddenly jerked the wheel back again over the limb at about the same place.

When seen immediately after the accident, the man was suffering severely from shock. On examination of the leg, I found a laceration of the integuments on the outer and back part of the



thigh, commencing at a point a little below and to the outer side of the knee, and extending the entire length of the thigh, ending at the sub-gluteal crease, the upper two-thirds of the rent being directly posterior.

The laceration extended through the integuments and cellular tissue, and at about the middle of the thigh, the superficial flexor muscles were torn entirely across, their ends hanging from the wound.

The femur was fractured, with some comminution at about the junction of the lower with the middle third; leg everted, and two inches of shortening.

The skin on the anterior aspect of the thigh, bore two broad marks as of intense compression, though but slight breaking of the skin had occurred. A tear was also found extending from just in front of the anus, up the side of the scrotum, nearly to Poupart's ligament.

That more extensive lacerations of the limb had not taken place, seemed owing to the fact that

the man was very heavily clad in strong outer and under-clothing, and to the slow motion of the car.

Under an anæsthetic, I made careful examination; the man begging me previously to spare him his leg, even at an increase of risk to his life.

On introducing my fingers into the wound, I sought for the communication with the fractured bone, which I felt sure existed, but I could detect none.

Circulation being good in the lower leg, and sensibility fair, I determined to make an attempt to save the member, even if in a very imperfect condition.

The external wound, which was gaping widely, was closed with sutures, the leg was placed in a straight position upon pillows, and carbolated water dressings applied. Considerable traumatic fever was present during the first few days, and much swelling, especially at the knee.

The water-dressings were continued for ten days, the patient being rolled upon his side for their application, and the leg supported by assistants; but although conducted with the utmost care, at each dressing quite a considerable amount of displacement occurred at the seat of fracture.

To arrange some fixed apparatus for the fracture, which at the same time would permit the attention demanded by the wound, now became a necessity.

After the sutures and some sloughs had separated, leaving the wound clean, I applied extension by adhesive straps, weight, and pulley. Counter extension being secured by the weight of the body, the foot of the bed being raised six inches, Ahl's posterior tibial splint was applied to the lower leg, swinging the same by cords to pulley in the ceiling. I now made a posterior thigh-splint of *sheet zinc*, long and wide enough to embrace the entire back of the thigh, perforated with holes about one-eighth inch in diameter as thickly as was consistent with strength, laid a covering of carbolized gauze over internal surface, and applied the splint thus prepared to the thigh; the raw surface lying directly upon the zinc, only covered by the gauze. Two wire bails were now put across over the thigh, attached to the splint on either side; to these I attached a cord which passed over a pulley in the ceiling. I now, by tightening both my suspending cords, could elevate the entire leg free from the bed, and lower at pleasure, the leg being still kept in line without removal of the extension, as the pulley was some two feet removed from the foot, thus allowing considerable latitude of motion.

The daily dressing consisted of a pillow of absorbent cotton, covered with carbolized gauze, placed under the metallic splint, and receiving the drainage which passed freely through the perforations, the gauze-lining of the splint serving to prevent the protrusion of fungus granulations.

After dressing, the leg was lowered nearly, but not quite, to the bed, the Ahl thigh-pieces were applied to the sides and front of the thigh; a long outside splint reaching to the axilla and below the foot, with a wooden pin at the edge of the lower end passing through a bar fastened across the foot of the bed, was now bound fast to the leg at ankle, knee, upper part of thigh, and by body band, serving to keep all firm and immovable.

For extension weight I at no time used over eight pounds, the weight required probably being less on account of section of some of the muscles.

Some sloughing of the skin on front of thigh took place, but wound soon healed, as did also the wound along the perineum.

My daily routine now consisted of loosening the long splint, laying it aside, raising the leg with the aid of an assistant sufficiently high to allow of the removal of the soiled pillow, and the substitution of a fresh one, lower, and reapply the long splint.

The result has exceeded my most sanguine expectations; the zinc proved soothing to the wound, the discharge, profuse at first, gradually lessened, and at the end of the sixth week after the application of the splint, bony union was found to have taken place, and after waiting for additional security two weeks longer, the apparatus was removed, the wound examined and found healthy, fully one-half its length being healed, and healthy granulations, even with the surrounding skin, covering the remainder, with the process of cicatrization progressing rapidly. Two weeks have now elapsed since removal of the splints, and the wound, which is dressed with oxide of zinc ointment, is healing slowly, but kindly. The patient is now able to sit up in a chair, and begin the use of crutches.

On the most careful measurement, no shortening can be detected.

The bed used was improvised from a canvas-covered cot, a trap being cut; and a cushioned cross-board below, with loose hinges at one end, and hooks at the other, served to close the opening when not in use.

I am aware that our best authors advise amputation in cases of this kind, and it may have been a very dangerous experiment to make; but as the case has progressed so happily thus far toward a

cure, and believing the use of the *zinc splint in direct contact with the large wound* is somewhat novel, I will submit the report of the case for what it is worth.

ODONTO-PERIOSTEAL TUMOR SIMULATING PULP-FUNGOID.

BY JOHN S. SMITH, D. D. S.,
Of Lancaster, Pa.

Miss K., a lady aged 21 years, presented herself for treatment October 12, 1883.

She had long suffered from neuralgia, confined principally to the right side of the face, and particularly along the course of the inferior maxillary nerve.

Examination revealed caries of the teeth. Several had died, and there were suppurating pulps in others which were exposed and congested.

When making the examination, my attention was arrested by seeing a tumor the size of a large bean, which completely filled a carious cavity of the first permanent molar tooth on the lower jaw. The crown of the tooth was broken in places nearly to the line of the gum, and the tumor overlapped the rough edges. This caused the growth to present an angry and inflamed appearance. There was considerable pain when pressure was made to the alveolar process corresponding to the tooth.

The growth was over three years old. It had not been troublesome until within the past year, during which time it had steadily grown worse, and this, and the painful condition of her other teeth already mentioned, drove the lady to seek surgical aid.

Diagnosis.—What is this growth? To all appearance it looks not unlike the pulp-fungus which has its origin in the bulbous portion of the tooth-pulp, and could be readily mistaken for a fungus of that expression. In the latter condition the removal of the tooth would be alone sufficient for a cure. The removal of the tooth would also remove the tumor.

We find by a careful examination with a probe that the fangs of the molar have been suppurated, and that the probe passes through into the alveoli; in fact, the fangs seem to be imbedded in the stroma. The fangs are loose, and portions of the alveolar process have been absorbed, so that the probe can readily be passed through it.

That the tumor is an outgrowth of that aspect of the odonto-alveolar membrane which adjoins the bone, is beyond doubt. The growth has passed through an opening between the roots of the tooth, making its appearance as above described.

We will therefore exclude pulp-fungus, which has its origin within the stroma of the dental pulp, which condition is perfectly innocent and benign in its nature.

The tumor was a form of epulide simulating, as location is concerned, the pulp-fungus, but a portion of the jaw was found implicated. It had involved it. In this case the simple removal of the tooth would not effect a cure.

Treatment.—The patient was placed in a Morrison dental chair, in a recumbent position, and etherized, Dr. D. R. Summy and Martin H. Musser assisting. The fangs were quickly removed. The engine burs were then made to complete the operation by cutting down that portion of the alveolus and bone involved; the gums were not cut away by the operation, but left intact on the outer and inner borders, this being preferable to removal, as it is a means of retaining the after dressing when found necessary. The hemorrhage was easily controlled with phenol sodique and tannic acid on cotton packed into the cavity.

In two weeks the wound was nicely granulated, and there has been no return of the tumor.

The other diseased teeth were subsequently treated and properly filled, and the neuralgic pains have entirely disappeared.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE PHILADELPHIA HOSPITAL.

BY WILLIAM PEPPER, M. D., LL. D.,

One of the Physicians to the Hospital, and Professor of Clinical Medicine in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

The Treatment of Epilepsy—Lecture 2.

GENTLEMEN: You will remember that at the last lecture (see page 41) I brought before you two cases illustrating the graver forms of epilepsy, one coming on early in life, the other not making its appearance until adult age. In connection with these cases, I alluded to the following causal conditions, injuries to the head, a very frequent factor, and one the exact significance of which requires careful study to determine in individual cases. Heredity and the constitutional and spontaneous character of the disease is opposed to the secondary or organic character, a factor of greatest possible importance, both in treatment and prognosis; and the existence of peripheral irritation in any spot, a subject which requires close study in every case in order that we may avoid overlooking any such cause of reflex disturbance. I alluded particularly to lesions of the genitals, and especially to adherent prepuce and deranged conditions of the gastro-intestinal canal,

not only from worms and foreign matters, but also from slight chronic irritation of the mucous membrane.

Of course, in studying epilepsy, we separate epilepsy proper from those cases of epileptiform convulsions resulting from some serious lesion of the nerve centres, and leave entirely out of consideration these latter cases where there is some lesion of the brain, and recognize in epilepsy the expression of a tendency on the part of the nervous system to pass into a convulsive state from depressing or disturbing causes of a more or less powerful character.

I dwell upon the extreme importance of hygiene and suitable regimen in these cases, and I wish to speak a little further in regard to the influence of diet in cases of epilepsy, for it is one of the fundamental features of the scientific treatment of this disease. I know no disease in which it is more essential to pay attention to this point than it is in this; and it is the more important, because epileptics are, as a rule, voracious, hurried and careless eaters, often having morbid desires, and usually difficult to control. On the one hand, we have a disease which is undoubtedly attended with depression of the nervous system; and on the other hand, one in which a nourishing diet, consisting of such articles as minister to nerve force, is required. Fats and nitrogenous food are indicated, but it must always be remembered that the nervous system is so sensitive that the least peripheral irritation, and especially, I think, irritation of the stomach and intestines, will excite convulsions, or increase the tendency to them. The arrangement of the diet so that it will not, on the one hand, be too restricted and debilitating, and on the other hand, that it will not irritate the stomach, will require careful study of the individual case, and a thoughtful adaptation of the diet to the patient's means. This is further complicated by the fact that many of these patients are uncontrollable, and it will often be found exceedingly difficult to get them to adopt and follow out any special line of treatment.

In some cases in which the irritation of the stomach and bowels is manifestly very great, you will find remarkable results follow from placing the patient on a really rigidly restricted diet. I have had under my observation for several years, a young man who had evidently overworked himself at his trade and had become an epileptic. Many members of his family had exhibited nervous phenomena of various kinds. This young man was delicate, and after he had worked at his trade (plumbing) for some time—working long hours in a cellar without sunlight—he began to have spinal tenderness, and then vomiting occurred frequently after eating. He was at this time eighteen years of age. He grew anæmic, his work became laborious to him, and he then began to have convulsive seizures, which were quite severe and were frequently repeated. There had been no history of epilepsy in this family, although his father is neurotic, and one brother has marked nervous irritability, and also incipient phthisis. This patient also suffered from gastro-intestinal catarrh, and he was put to bed, his diet restricted to milk, and minute doses of nitrate of silver and belladonna administered. This treatment was used simply with the view of im-

proving the gastric symptoms, and not with any expectation that it would influence the convulsions; and yet these convulsive seizures, which had lasted for two years, and which I had treated with a number of remedies without decidedly improving them, gradually grew less frequent, and in a few weeks stopped entirely. The treatment which I have mentioned was then kept up for a number of months, and the result was a perfect cure. This occurred four or five years ago. The young man occasionally suffers from indigestion; he then goes to bed and limits himself to milk, and in a few days he is well again. This case illustrates what can sometimes be obtained from a restricted diet, combined with rest where there is distinctive evidence of gastro-intestinal irritation, and which, combined with an exaggerated nervous irritability, plays an important part in the causation of the convulsions. But I would not pretend to recommend any exclusive system of diet or invariable restriction of the patient. One would err greatly by insisting on too much restriction. I, however, dwell upon this because there are some cases, and you will recognize them by careful study, where this is an essential part of the treatment, and to impress upon you the fact that in all cases, this is an important part of the treatment. This is further shown by the fact that patients will nearly always become worse when you allow their digestion to become disturbed, and that after some error in diet they will have an outbreak of convulsions, and that after being placed on a restricted diet, they will soon settle down to their natural condition. I think, therefore, that we may say that there is no successful treatment of epilepsy without careful attention to the diet, and that in a limited number of cases a cure can be effected by prolonged rest and an absolutely restricted diet. This need not always be a milk diet. There are other forms of diet which are applicable to special cases.

In passing, let me refer to one of these methods, which has attracted considerable attention by the success which has followed its use in the hands of its introducer, Dr. Salisbury. I refer to the diet of raw meat, or meat almost raw, and hot water, with an exclusion of all the oleaginous and starchy ingredients of the food. This is, of course, especially adapted for that type of dyspepsia in which the salivary and pancreatic juices are deficient, and there is a large number of dyspeptics who present this characteristic. The raw meat diet, even if the meat be selected with equal care, has certain disadvantages, among which the risk of infection with tape-worm is by no means the smallest one. But by rapidly broiling the meat and raising it for a moment to a high temperature, so that the activity of any ovum contained in it would be destroyed, or by the use of such care in the selection of the meat that there would be no risk of infection, the raw meat treatment of chronic disease deserves careful attention, and will produce remarkable results in a good many cases. Dr. Salisbury recommends that the meat be prepared by the American Meat and Vegetable Chopper, by which the meat is finely minced, and after twenty or thirty minutes' chopping, there is found on the surface of the meat in the tin cylinder connected with the machine, a red pulp, reduced almost to a powder, and beneath this is a

layer of reddish-gray fibre which is almost entirely indigestible. In preparing the "Salisbury steak," this red pulp is formed into pats, put into a wire broiler and broiled for four or five minutes before a hot fire. Prepared in this way, the meat requires very little mastication; and through its use, remarkable alternative effects can certainly be produced upon the system, which is the object to be attained by the use of restricted diets. Perhaps this is sufficient to explain to you the enormous importance which I attach to this element in the treatment of epilepsy.

When I saw you last I referred to the importance of rest in the treatment of this disease. There is, in all these cases, a tendency to nervous prostration, and this peculiarity in epileptic cases is not always sufficiently recognized. We are too much in the habit of regarding epilepsy as a disease subject to fluctuations which have no reference to external causes; but a careful study of the effect of diet will convince you that epilepsy is extremely susceptible to external influences, that it can be made better or worse by momentary occurrences, and that the patient's attention or inattention to a careful regulation of his diet, to proper habits of life and modes of exercise, has much to do with the rarity or frequency, and the mildness or severity of the attacks. Attention to this point has shown me that many epileptics, as long as they avoid over-fatigue or over-excitement, will have none or only few and slight spells, but that over-exertion just as over-excitement is sure to be followed by an outbreak of one or more convulsions. The effect of excitement upon epileptic seizures has long been recognized. I have patients under observation now whose histories I have known for many years, and in some longer than my own life, in whom convulsions occur only at moments of extreme excitement. I have one, a man of the highest intellectual ability, who will go for three or four years without a spell, but if he allows himself to be overwrought, will have a series of attacks lasting perhaps for twenty-four hours. After resting for a week he is able to return to his work, and enjoys complete immunity for several years. History is full of instances of men of remarkable intellectual vigor and emotional power, who at times of excessive exertion or excitement became epileptic. From these marked examples of the effects of excitement down to what we see in the ordinary epileptic, there is every gradation of susceptibility to such causes. This is even more marked in the milder forms of the disease.

There is a class of cases to which the name petit mal has been given, which I allude to here partly on account of their diagnostic importance, and partly because they so well illustrate what I have just now been saying. These cases are extremely common. The patient never has a full convulsive seizure, but at more or less frequent intervals he will have attacks of transient unconsciousness. These attacks may be often repeated, even several in a day, or they may come at long intervals. They frequently occur at night. These spells are just as truly epileptic as are those attended with severe convulsive movements, nor is it a very favorable form, often proving extremely obstinate and rebellious to treatment; not rarely it passes into the fully developed form of

greater epilepsy, and even when it does not do so, this form of epilepsy is often followed by grave effects upon the mind and character of the patient. It is therefore a form of epilepsy of the gravest significance and of the greatest importance. Petit mal assumes different forms, sometimes so slight that it is not recognized for years. Parents will often say that their child has had holding-breath or gasping spells for a long time. These are attributed to some trifling cause, and the fact that they are the evidences of one variety of epilepsy is not recognized. They are sometimes so slight that it is not surprising that they escape detection. It may simply be an instantaneous pause and then a resumption of what is being said or done, without the patient being aware of the interruption. I have under observation a large number of these cases who are liable to these spells, and it is distinctly my opinion that the attacks are increased, and sometimes actually induced, by exertion, fatigue, or excitement; and not rarely have I found patients, more particularly women who never had these spells except when greatly fatigued. For instance after menstruation, when the system is especially sensitive, exertion will be followed for a day or two by these seizures. By recognizing this element of nervous exhaustion, and carefully guarding against such exhaustion, I have repeatedly seen this type of epilepsy slowly decline and entirely pass away.

I am now treating a lad of ten years, the son of highly neurotic parents, who suffers from these slight attacks, which he describes as feelings. He is an extremely bright lad, and stands at the head of his class at school. He is conscious of a little aura, beginning behind the sternum. The boy has been under treatment some four or five years, but neither diet nor therapeutic measures have controlled the attacks. A short time ago, I took the boy from school and ordered him to stay in bed until eleven o'clock in the morning, when he gets up and walks about or plays for a couple of hours. He returns, lies down, and takes his dinner in bed. An hour or two after dinner, he again rises and exercises for a couple of hours, and then goes to bed. His diet is carefully restricted. He is taking cod liver oil with lactophosphate of iron, but no bromides or other remedy to check the attacks. Yet under this treatment decided improvement is for the first time reported. The boy says that the spells are only half feelings now, that he does not lose himself. His mother states that she has not seen any, even transient, unconsciousness for a number of days. Previous to this he would have at least three attacks a day. If the improvement continues, I shall keep up this limited rest. If it does not, I shall make the rest absolute, keeping him in bed for a number of months. But here, both in children and in adults, comes the difficulty of restraining these patients, and this is far worse in adults than in children. After the disease has lasted a little while, there is a marked effect on the temper, and often on the intellect of the patient.

I wish to show you now a little child who presents the saddest form of this disease. He is eleven years old, and has been in the institution for four years. We have, for want of a better place, sent him to the insane asylum. The his-

tory is that he was in perfect health until three years old, when he fell down stairs, receiving a severe injury to the head. From that time to the present he has been subject to epileptic attacks, mostly of the milder form, although he sometimes has severe seizures with violent convulsions, and foaming at the mouth. His intellect soon became impaired, and this was followed by a total disappearance of the power of speech, which he had in a good degree at the time of the injury, so that he is now absolutely aphasic. When placed under treatment with bromide of potassium and sodium, he improves—that is to say, the attacks are less frequent. Some other remedies, such as hydrobromic acid, produce no effect, or make the attacks worse. It seems necessary to keep him on the use of bromides. He seems to possess little more than brute instinct. He requires constant care, and unless carefully watched, will carry the most filthy articles to his mouth. If we had seen this child seven or eight years ago, soon after the fall, it would have brought up the questions in regard to operative measures which I considered at the last lecture. Whether the injury was the sole cause of the epileptic attacks, or whether the child had an epileptic tendency which was simply called into life by the injury, we can not now say, for our knowledge of his previous history is very slight. A careful examination of the skull shows no sign of old depressed fracture, and we have nothing to guide us to the seat of the lesion; nor do I think that at this period after the injury, and in the absence of paralysis, or anything else to indicate the seat of the lesion, it is proper to interfere in any operative manner. The brain has been arrested in its development, and is certainly organically affected by the injury.

Such cases as this make us almost wish that in some painless way we had the power to take human life; for this child living, as he may do, to be an old man, will always be dependent on public charity for his care. In thousands of families there are such children scrupulously hidden from all knowledge of the public, acting as a drag upon the entire family circle, by the sadness of the symptoms and the incessant watching, and the painful incidents that are connected with the progress of such cases. From such cases as these you can readily understand of what great importance is the course of action which you decide upon when called to treat this disease in its incipient stage.

I shall now refer to the drugs which are to be used in the treatment of epilepsy. All the drugs known to man have been used in this disease, and of very few of them can it be said that they are innocent: most of them are injurious. Some of them are used simply for temporary purposes, for the improvement of the digestive functions, for the regulation of digestion, for overcoming constipation, and the like—though, as a rule, I think the less we use drugs for these purposes, and the more we depend upon regimen and diet, the better it will be. In certain cases, nutrients and tonics are necessary, and you will often find iron, cod-liver oil, preparations of the phosphates and hypophosphites called for to remedy the condition of malnutrition. Where positive indications for the use of these drugs are not present, their administration is, of course, undesirable. They

should not be given from any theoretical view, but given in the same conditions as call for their use in other diseases.

In addition, there are certain drugs given with the view of controlling the occurrence of the spasms. Until the discovery of the great anti-convulsive powers of the bromides, all forms of anti-spasmodics and anodynes had been used for this purpose, and of them, it may be truly said that nearly all of them were injurious far more than beneficial. There are cases in which these drugs are to be used to fulfil special indications. Certain remedies directed to the nervous system, as the oxide and valerianate of zinc and preparations of silver, notably the nitrate, have well established cures to their credit. There is a widespread impression among the populace that nitrate of silver cures fits. Many of those suffering from argyria are people who, suffering from epilepsy, have gotten hold of a prescription containing nitrate of silver, and have on their own responsibility continued its use for a long time. It is not an easy thing to produce argyria, and it requires a good deal of nitrate of silver to do it; but if a person takes half a grain of the drug, three times a day, for from eight to twenty-four months, intense discoloration of the skin will be produced. Nitrate of silver has undoubtedly cured a certain number of cases of epilepsy. When we reflect upon its mode of action, it is difficult to think that its good effect is due to a direct influence upon the nervous system. The cures effected by nitrate of silver seem to have been in cases in which a marked tendency to epilepsy has been associated with disturbance of the gastro-intestinal canal, which has served as a source of peripheral irritation, and this cause of the convulsions having been removed, the patient has recovered. In such a case, its effect is not due to a direct influence upon the nervous system, but to its well-known alterative action upon the surfaces with which it comes in contact. This is another illustration of the importance of attending to peripheral conditions. I presume that arsenic, in the same way, by its alterative and stimulant action, in removing anæmia or some malarial condition, or some trouble of the abdominal organs, has taken away the cause predisposing to the convulsion.

As you know, there is a class of anti-convulsive remedies which contain nitro-glycerine, nitrite of amyl, and all the bromide series, of which the bromides are the most valuable. Their discovery has greatly modified the treatment of epilepsy, and has enabled us to control symptoms in nearly all cases, and to effect a cure in a certain proportion of cases otherwise totally hopeless. Few more valuable additions have been made to the pharmacopœia than is this class of remedies. A vast deal of damage has been done by the reckless and excessive use of the bromides, but great good has been done by a proper and judicious use of these remedies. There are certain plain rules which can be laid down in regard to the use of bromides in epilepsy.

The bromides should at first be given in small doses, and only one of the bromides be given, I do not care which one. After studying the effect of this, larger doses may be given, a combination of bromides or another bromide substituted for the first one given, if the effect is not satisfactory.

The evidences of bromism must be carefully watched, for not only should you look for acne, but also for evidences of mental weakness and nervous depression, which are among the worst results of the constitutional action of these drugs. When these symptoms are produced, the bromides are doing more harm than good, even if they control the attacks. The use of large doses of bromides under these circumstances may produce secondary trouble more serious than the original disease. Nor should the use of bromides be permitted to become too habitual. Of course, some exceptions to this rule have to be made. There are persons who are perfectly well while using the bromides, but who, on stopping them, begin to have convulsions. The spells may be held absolutely in check by doses of from ten to fifteen grains of bromide of potassium or sodium three times a day, although they continue this dose for years. These are instances of the best results of these drugs. In the average case, the result is not so good. While a full dose is taken, the patient is better, but still continues to have a few attacks. Under these circumstances it is better to interrupt the use of bromide for a time, and either substitute some other anti-spasmodic, or allow the patient to go without any drug for a time, than to keep it up constantly and increase the dose as the patient becomes habituated to it.

You will find the details as to administration in your books. Acne can often be prevented by associating a little arsenic with the bromide. The great underlying principles are that the bromides should be used at first in small doses, which may be cautiously increased; that where they are continued for some time, changes should be made in the mode of administration; that a careful watch should be maintained lest symptoms of a serious bromism appear, and on their development, the bromide should be stopped, no matter how urgent is the apparent necessity for its continuance; that where the attacks are not absolutely controlled, the bromides should be occasionally interrupted in order to allow the patient to regain his normal condition, instead of increasing the dose, that only in those cases in which the bromides procure complete, or almost complete immunity, should their use be continued without intermission for a long period of time; and that while employing these remedies care should be taken to prevent disturbances of digestion from their administration.

MEDICAL SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, December 27, 1883. The President, Dr. Tyson, in the chair.

Case 1. Fracture of the Base of the Skull.

Exhibited by Dr. Guy Hinsdale.

J. H. W., æt. 50, fell on the ice December 8, 1882, striking upon the stone pavement. The blow was received upon the posterior and left side of the skull, and the skin was not broken. He was shortly after admitted to the Episcopal Hospital, and was totally unconscious. Blood was

found flowing from his mouth and left ear, and his nose contained clots. His pupils afforded no evidence of his condition, because of an iridectomy which had been performed on both eyes some years previous. He talked incoherently; breathing was labored, and at times stertorous. Paralysis of the left leg was noted.

Blood continued to issue from the left ear, and on the second day the discharge became thin, and continued serous until his death, which occurred on the eleventh day. The urine was examined several times, and found to contain sugar in moderate amount, but no albumen. Urine was passed freely. The patient never regained consciousness; he became more stupid, and paralysis of the left leg remained.

At the autopsy a superficial clot was found over the brain beneath the seat of injury. A very large clot was found over the right frontal region, beneath the membranes, and filling the sulci between the convolutions. This was the result of the counter-stroke, the force having been first received at a point diametrically opposite, and fully accounts for the left-sided paralysis. The fracture was slightly over five inches in length. It extended from a point in the left occipito-parietal suture, one and a half inches behind the temporal bone, and traversed the suture, passing through the petrous portion of the temporal, the auditory canal, close to the inner side of the foramen ovale, towards the foramen rotundum, where it terminated.

Case 2. Necrosis of the Temporal Bone and Brain Abscess.

This specimen was removed from the body of Margaret P., æt. 46, who died in the Episcopal Hospital, September 21, 1882, after long-standing aural disease.

In early childhood she had scarlet fever; this was followed by aural catarrh, and the discharge from her ear continued until death. She stated that when twenty-two years of age a polypus could be seen in her ear. Fifteen years ago this was removed; again masses were removed thirteen years, two years, and one year ago.

In May, 1883, four months before her death, the patient consulted Dr. Burnett, who has very kindly furnished me with notes of that date. The patient presented, at that time, a most wretched appearance. Extreme weakness, pallor, and emaciation betrayed the intense suffering of this unfortunate woman. Paralysis of the right side of the face had occurred during the previous winter, without the supervention of additional ear symptoms. At the time of examination she presented great sensitiveness of the auriculo-temporal nerve, and complained of intense pain over the right temporal bone. To control this pain, she was accustomed to use morphia suppositories. An examination of the ear revealed a mass of granulations filling the entire lumen of the auditory canal, half an inch from the entrance. Late in May a large polypoid mass was extracted; bare bone was then discovered on the posterior portion of the canal, the channel narrowed and blocked with granulations. About two fluid ounces of blood escaped after removing this mass.

When I saw the woman at the hospital in September, she was in a very low state, and evidently near her end. Her mind was seriously affected,

conversation was impossible, and she groaned with the pain, which large doses of morphia would not altogether control. There was a moderate but constant purulent discharge from the ear and from a sinus which was found above the meatus. The whole temporal region was boggy. The probe passed in freely over an inch, and loose particles of dead bone could be everywhere felt. The disease had long been beyond the reach of any remedy, and there was nothing to be done but relieve pain and await her death.

The specimen removed embraces portions of the right temporal, parietal, and occipital bones. Almost all the temporal bone has been destroyed. Only the mastoid process and the upper border of the squamous portion remain. An area of bone $1\frac{1}{2} \times 2$ inches has entirely disappeared. Adjacent to this region, and lying next to the middle fossa of the skull, was a brain abscess, the walls of which were greatly thickened. On opening this cavity, about an ounce of thick yellowish pus was found. A probe easily reached this cavity through the auditory canal and the sinus above it, and many loose fragments of bone were found at the outlet. The styloid process was found loose, but held in position by the various ligaments that arose from it. The inflammatory process, in which the meninges had of course shared, was not acute, the brain substance beyond the abscess walls had no unusual appearances, and the left cerebral lobe with its membranes were normal.

Dr. C. H. Burnett thanked the Society and Dr. Hinsdale for the opportunity of seeing this very interesting specimen, and of making a few remarks upon the case. The great destruction of bone tissue is remarkable and unusual in extent, being three inches in length, and one and one-half to two inches in breadth. The necrosis seemed to have originated in the tympanic region rather than in the mastoid, and hence belongs to the class of cases second in frequency—the most frequent being those fatal cases where the bone disease originates in and extends from the mastoid cavity. The case when seen by Dr. Burnett in the spring of 1883, presented very grave symptoms, and the patient was extremely weak; so much so that Dr. Burnett was surprised that she lived until September. The occurrence of extensive granulations in the external auditory canal constituted a very unfavorable feature, as they acted like a dam, preventing the escape of the products of inflammation, and held them back in the tympanic cavity and mastoid cells, forcing them to break an escape through more important and vital tissues. The case furnishes another example of the evil of neglect of purulent disease of the ear. Dr. Burnett inquired whether there were symptoms of destruction or implication of any of the nerves passing through the cavernous sinus, as would be shown by alteration in parts supplied by the oculo-motor, the pathetic and ophthalmic nerves.

Dr. Hinsdale replied that no eye symptoms had been ever detected.

Case of Phthisis with Empyema.

Presented by Dr. H. M. Fisher.

The patient, J. C., æt. 21, was admitted to the Episcopal Hospital, March 17, 1883. The following notes of the case were taken by Dr. George M. Boyd, the resident physician:

Patient states that he has had a slight cough for one year, but was not much annoyed with it until about one month ago, when he was seized with severe pain in the left chest, accompanied by chilly sensations and difficulty of breathing. Upon admission, he presents all the symptoms of left pleural effusion, absent vocal fremitus, tubular breathing, and bronchophony in the neighborhood of the spinal column on the left side. His chest was tapped on the morning of March 21, and three pints of a semi-purulent fluid were evacuated. The operation was followed by great improvement in the patient's symptoms. Three weeks later he left the hospital, contrary to advice. He was readmitted April 20, and stated that soon after leaving the hospital, the pain in the side returned, followed by dyspnoea.

April 23. Paracentesis thoracis was performed by Dr. Henry, and fifty-six ounces of purulent fluid were drawn off, and the operation again afforded great relief. A violent fit of coughing followed the withdrawal of the canula. The heart's apex beat was found, before the operation, to be immediately below the right nipple; after the operation, it was found to have shifted one inch to the left, or its previous position.

May 5. Dr. Forbes operated at Dr. Henry's request, making two openings into the left pleural cavity, one at the fifth interspace, the other at the fourth, and to the right of the first. Ten ounces of purulent fluid were withdrawn by means of aspirator, and a soft rubber catheter was passed in at one of the openings and out at the other. The pleural sac was then ordered to be washed out daily with a solution of corrosive sublimate gr. i.- $\frac{3}{4}$ j.

During the summer the patient's general condition seemed for a time to improve; his appetite, however, continued obstinately bad, and he had constipation alternating with diarrhoea. In October it was noted that he was losing flesh and strength rapidly, and that there was much oedema of the feet and legs. During this month diarrhoea became a constant symptom, and death occurred November 22.

Post-mortem Examination, Ten Hours after Death.—The body is extremely emaciated. The left lung is contracted to about one-fourth of its normal size, contains in its upper lobes some cheesy masses with areas of catarrhal pneumonic infiltration. The left pleural cavity contains about five ounces of ichorous pus. The parietal layer of the left pleura is so tightly adherent to the chest wall that it is impossible to detach it without dissection. The pulmonary layer is also tightly adherent to the contracted left lung, the lobes of which are firmly matted together by adhesions. The right lung also presents numerous cheesy foci, with large areas of catarrhal pneumonic infiltration. The heart is rather small, and its tissue is pale, but its valves appear normal. The liver weighs 6 pounds $6\frac{1}{2}$ ounces, its tissue is pale, and it has a *markedly waxy appearance*. The spleen is much enlarged, its tissue *firm and of a dusky-red hue*. Numerous *yellowish-white nodules* are also seen in it, the largest of which is perhaps the size of a small pin's head. The kidneys are rather large, their capsule is non-adherent, and their tissue rather paler than normal. Numerous *minute whitish nodules* are also found to be scattered through

the tissue of both kidneys. These appear rather more numerous and larger in the cortical portions, but are also found in the medullary portion. From some of the larger nodules a whitish puriform substance can be squeezed out with the blade of the knife. With the naked eye the exact nature of the above-mentioned infiltrations of the spleen and kidneys is difficult to determine. Nothing abnormal was noticed in the intestinal tract, except in the ileum, where an area of intense congestion was noticed, about one yard from the ileocaecal valve, but no ulceration was anywhere detected.

My view of the sequence of pathological events in this case is the following: *First*, catarrhal pneumonia, with the production of cheesy foci; *Secondly*, serofulous inflammation of the pleura, with attendant exudation, which, from the start, was more or less purulent, and *thirdly*, the infiltration of the *liver, spleen*, and possibly also the kidneys, with amyloid matter.

The exact nature of the yellowish-white nodules in the spleen and kidneys being yet undetermined. I cannot yet assign to them a positive place in the chain of serofulous processes; but, from the absence of any macroscopic evidence of embolic infarctions, or of any appearance of infarction in the one microscopic section of the kidney I had the opportunity of examining (kindly made for me by Dr. Henry), I should conclude that these were also cheesy foci, and their production may perhaps have nearly coincided in point of time with the production of the cheesy foci in the lungs above alluded to.

Dr. Shakespeare said that the specimen was a good instance of miliary tuberculosis. The small collection in the spleen might be tuberculous, he thought, and should have been examined for tubercle bacilli. He adverted to the successful employment of very weak solutions of corrosive sublimate in washing out suppurating serous cavities.

Atheroma, dilatation, and aneurism of the aorta atheroma of some of its branches; death from rupture of the aneurism into the left pleural cavity; congenital deformity of the stomach; malposition of the transverse colon and right kidney; irregular shape of the kidney; anomalous origin of the renal arteries and of the ureter.

By J. H. Musser, M. D.

This remarkable series of specimens illustrate how serious a disease can be in progress within the body without any manifestations. The patient had been under the care of Dr. Ludlow, in the Presbyterian hospital, complaining of and being treated for nasal catarrh. He complained also of a slight bronchitis, but not being very decided, the nasal trouble alone was treated. A white man, æt. 63, well nourished, of temperate habits, and by occupation a wheelwright; he was under observation ten weeks; no previous illness. He slept well the night before his death, until 5 a. m. He then told the night nurse he was very cold. Being covered, he went to sleep apparently; an hour afterwards he was found dead. The writer made the autopsy, about twelve hours after death.

Inspection.—Rigor mortis well marked; body well nourished; no scars or bruises; no ecchymoses; abdomen moderately distended; in the right lower

quarter a decided swelling was noticed, almost filling that area, and resonant on percussion.

Section.—Abdominal cavity first examined. The above described swelling was due to the cæcum and transverse colon. The ascending colon extended about half way the usual distance, and then turned at a sharp acute angle into the transverse colon. The latter descended parallel to the former into the right iliac fossa, and from thence diagonally upwards across the abdomen to the usual place of junction with the descending colon. The omentum contained a considerable amount of fats. The right lobe of the liver could not be seen until removal of the ribs, when it was found two inches above their margin, and to be only $2\frac{1}{2}$ inches in length in the nipple line. In the median line this same perpendicular length was three and one-half inches. More of the left lobe was visible than the right. Along the edge of the left lobe, from the median line, four and one-half inches in length, extended the *stomach*. It appeared to be small in size. When removed, it was found to be divided by a constriction five inches from the fundus; from this constriction to the pylorus the length was four and one-half inches. The first, or cardiac end, was much smaller than normal, the walls and mucous membrane healthy. The second portion was a mere tube with thick walls. The thickening was due to the hypertrophy of the longitudinal muscular layers, and to the folds that the mucous membrane was thrown into. These folds were very marked, longitudinal, and on their crests congested. The peritoneum was opaque and thickened. The *liver* was smaller than usual also. The capsule was thickened and opaque along the edges of the right lobe; on its convex surface there were cicatrices and a firm adhesion at one point to the diaphragm. On section, the tissues were firm, on pressure congested. Commencing cirrhosis noted on microscopical examination. The gall-bladder projected one inch below the liver margin in the nipple line. The left *kidney* was found in its normal position. It was much enlarged, five inches long, two thick. The *pelvis* was filled with fat, the substance pale, hard on pressure, with a contracted cortical portion. The capsule tore off easily. The right kidney was found in the pelvis at the right sacro-iliac articulation. It was small in size, irregular in shape, parallel to the sacrum. The portion dipping downwards tapered to a point, being one-half inch in width: the upper portion was two inches wide. The pelvis of the kidney was filled with fat. Towards the small end of the kidney the hilus divided, one part extending upwards one inch, along one side of the organ, the other the same length on the other side; or it might be said a portion of the kidney dipped into the pelvis, separating it for an inch. The renal artery arose from the normal origin of the middle sacral. One inch from the point of origin it divided; one branch, two and a half inches long, entered one lateral hilus, if it may be so termed, the other divided two and a half inches from the main trunk, one subdivision entering the remaining lateral hilus, the other running across the floor of the pelvis to the normal end of the kidney. The ureter arose by three branches—two from the upper end, one from one of the smaller pelves.

Thoracic Cavity.—Left pleural cavity almost

filled with blood, the lung floating on the fluid. The lateral surface was adherent to the aneurism. In its removal the collapsed sac was seen on the left side of the vertebral column. The heart and aorta were removed entirely.

Heart.—Enlarged, left side especially; weight, $11\frac{1}{2}$ ounces; measurements of left ventricle, near base, $1\frac{1}{2}$ inches thick, in the middle $\frac{1}{2}$ of an inch thick, at apex $\frac{1}{2}$ inch thick; mitral valve a little thickened, aortic healthy. Atheromatous processes were present in the aorta from its beginning to the celiac axis, and extended into the latter vessel, and also the innominate and carotid arteries. These processes included the sclerotic changes shown by innumerable small, smooth, firm elevations of the surfaces, the degenerative changes, fatty and calcareous, and also the atheromatous. One calcareous plate was found in the celiac axis. From its origin to the middle of the transverse aorta, the vessel was dilated, and the characteristic fatty changes of the proliferated cells of the intima lemon-yellow colored, smooth, soft elevations, were marked. Opposite the trachea the caliber of the aorta diminished to almost normal size, and here the sclerotic changes were most marked, as well as around the mouths of the vessels. At the junction of the transverse and descending aorta, the lumen was again closed; here the aneurism originated. It was $5\frac{1}{2}$ inches long, and when distended 12 inches in circumference. It was of the true variety, but from it sprung four false aneurisms, varying in size from a filbert to a small egg. Organized clots covered the surface of portions of the wall, and on dissection it was found these clots were either in the false aneurisms or clinging to atheromatous ulcers. Rupture of the sac took place behind the pleural adhesions, and leaked into the cavity, finding its way through the adhesions. The vertebrae were not eroded, and although the sac was in contact with the left bronchus, there was no evidence of decided pressure upon it, while the relations to nerves, other vessels, and the œsophagus, were such that the usual pressure symptoms could not arise.

It is thus seen that by physical examination alone could this aneurism have been detected. There were absolutely no subjective symptoms, and the autopsy reveals the reasons of this.

Hour-glass Contraction of Stomach: Congenital.

Presented by J. H. Musser, M. D.

The patient, an adult, from whom I removed this stomach, died of organic heart disease. Constant vomiting occurred a few months before death, but as a sequence of the general condition of the patient, and not on account of the gastric changes. I call the appearance congenital, because of the absence in the clinical history of any occurrence throughout life to have caused it, and of the want of evidence on post-mortem inspection. The contraction took place in the centre and was transverse; the peritoneum and sub-mucous connective tissue was thickened at this point. Anterior to the constriction, the muscular coat was hypertrophied. The mucous membrane was thrown into folds in the constriction.

Lung from a Case of Pleuro-pneumonia, Complicated with Delirium Tremens.

Presented by J. H. Musser, M. D.

I present this specimen to-night on account of its perfection. It is the lower lobe of the right lung in the stage of red hepatization, as indicated by the appearance, weight, etc. Almost the entire pleural surface including the diaphragmatic, is covered with recent lymph, the layer averaging one-half inch in thickness. The tongue of the lung dipping into the space between the diaphragm and the thoracic wall is not solidified entirely. Here the lymph is abundant, and the contiguous portion of the lung is hepatized as if the inflammatory process extended from the pleura; this peripheral hepatized portion is but one-fourth inch wide; the inner and succeeding portion is not solidified.

The patient died eighteen hours after admission to the hospital, from heart-clot. When admitted there were evidences of its formation, and in addition he had delirium tremens. The pneumonia was distinctly recognized. There were no signs of simple or diaphragmatic pleurisy. It was remarked at the autopsy on removing the sternum, the extreme distention of the right heart, especially the auricle. On opening the heart, hypertrophied from other causes, the right side was found filled with blood and an enormous ante-mortem clot entwined around the leaflets of the tricuspid valve, and extending through the auricle into the pulmonary vessels. A similar clot was found in the left heart. The kidneys were congested, and commencing cirrhosis appeared manifest.

The history of this case antecedent to the admission to the hospital is as follows: The patient had been on a "spree" for two weeks, and five days before admission had had a severe chill, followed by the symptoms of pneumonia. Two days after the chill the mania developed, and on the day of admission he had been found wandering about the streets by a "crony," who brought him to the hospital. He was forty-one years old, a boss machinist, single, of intemperate habits.

Carcinoma of the Uterus, Fatty Kidneys, and Empyema.

By W. A. Edwards, M. D.

The specimens which I show you to-night were taken from the body of A. E. this morning. I have not, as yet, had the opportunity of examining them microscopically. The patient was visited but once before her death, by Dr. J. S. Watt, for whom I made the post-mortem examination. The history of the patient is of course imperfect, in fact little if any could be obtained; the symptom of which she complained the most was an ill-smelling, irritating discharge from the vulva; so our attention was first directed to the womb, which presents a scirrhus carcinoma of the external and internal os and of the cervical canal. The mucous membrane of the organ is softened and very rugous, looking not unlike a mammilated stomach; a microscopic section will probably show cellular infiltration. The uterus is enlarged; our subject was a multipara, æt. 45, nine children and two miscarriages. A cyst was seen in the right parovarium; its contents were pure serum. The ovaries presented areas of calcareous degeneration; other pelvic viscera normal. The kidneys are small, and appear to have undergone some amyloid change; the right one was a rib higher than its normal position. Heart muscle has undergone some fatty degeneration, as has also the aorta; valves almost normal, ante-mortem clots in each ventricle; that in the right is of unusual size. Pericardium contained the usual straw-colored effusion.

Lungs.—Left normal. Right, the pulmonary and costal pleuræ were in many places adherent by thick, well organized lymph, which beautifully illustrates the rationale of friction râles, their sudden appearance, short duration, and equally sudden disappearance. About a pint of purulent effusion was collected in the base of right chest. The diaphragmatic pleura was tightly adherent to the pulmonary, requiring some tearing in order to separate. The lobes of this lung are bound down by recent lymph. Scattered throughout the mesentery were to be seen areas of calcareous degeneration, about the size of almonds.

EDITORIAL DEPARTMENT.

PERISCOPE.

Dyspepsia as a Symptom of Kidney Disease.

The following is from a clinic of Dr. J. M. Da Costa in the *College and Clinical Record*, January, 1884: Robert E., a waiter, born in Scotland, was admitted into the ward October 15, 1883. He states that he has suffered with dyspepsia for the last fifteen years, but has had no serious illness in that time. In order to relieve his indigestion and want of appetite, he has been in the habit of taking a drink of whisky before breakfast, for ten or twelve years, and possibly more during the day, but he claims that he was not intemperate. He came here complaining of pain in his stomach, with frequent vomiting, both of food and of mucus; pain between his shoulders, constipated bowels, and bleeding piles.

Here is a man with a history of chronic indigestion, accompanied by loss of flesh; he has that peculiar melancholy look which comes from long-standing dyspepsia. He says that food lies heavily upon his stomach; he is troubled with wind, due to slow digestion; he has acid eructations occasionally, and gastric pain after meals. He states that he has lost from thirty-five to forty pounds of flesh in the last nine months. He is therefore losing flesh very rapidly, as you may see.

Before examining him, I would also tell you that he is also annoyed by palpitation or over-action of his heart. The temporal vessels are well developed; they are rather tortuous, and visibly pulsate. He has a pale, flabby tongue, showing the marks of the teeth.

Now, gentlemen, this patient, at first sight, seems like an ordinary case of chronic dyspepsia;

but the decided loss of flesh and the appearance of anæmia which he presented, seemed to me so out of proportion to the dyspeptic symptoms that I investigated the case further. This wasting and anæmia suggested a careful examination of the urine, and I think that I have found in that examination the true explanation of the case. The urine was albuminous, and it contained tubercasts; the specific gravity was rather low, 1.014. He states that he has had to rise at night to pass water, for many years. Now, you have before you a case which is of interest in this connection: This history of anæmia in a case of so-called dyspepsia is really quite the reverse; the dyspepsia is a secondary affair, and the symptoms are really due to the kidney disease. He has the form of renal disorder known as the contracted kidney, and with this the symptoms of gastric catarrh often assume such prominence as to lead to the belief that they are the only indications of disease. I point out the case as one in which the kidney disease is the most important feature. I also think that it was primary; it is difficult to say if it was really so or not, but it is not difficult to say that at the present time it is the constant drain from the kidney which causes the anæmia and impairs the general health.

I need not review the clinical features of the case of which I have just given you the key. Let us turn to the question of treatment. He was, for a time, upon a purely milk diet, with lime-water, and that was very effective in stopping the vomiting; he was subsequently allowed to eat eggs, and an albuminized diet, without meats. He was ordered five grains of pepsin after each meal, stopping all other prescriptions, and keeping him in bed. Partly with a view of improving his blood, and partly to act upon the kidney, I will now order him Basham's mixture. (3 ss. t. d.)

The Relation of Physiological Study to Pathology and Therapeutics.

In an interesting lecture in *Science*, Dr. H. Newell Martin says on this subject: I must find time to say a few words as to the connection of physiology with pathology and therapeutics. The business of the physiologist being to gain a thorough knowledge of the properties and functions of every tissue and organ of the body, he has always had for his own purposes to place these tissues under abnormal conditions. To know what a muscle or a gland is, he has to study it not merely in its normal condition, but when heated or cooled, supplied with oxygen or deprived of it, inflamed or starved, and see how it behaves under the influence of curare, atropine, and other drugs. From the very start of physiological laboratories, a good deal of the work done in them has necessarily been really experimental pathology and experimental therapeutics. I suppose to-day that at least half of the work published from physiological laboratories might be classed under one or other of these heads. And what has been the fruit? I can here refer only to one or two examples. It is not too much to say, that, though inflammation is the commonest and earliest recognized of pathological states, we really knew nothing about it until the experimental researches of Lister, Virchow, and Cohnheim; and that all we really know as to the nature of fever is built on

the similar researches of Bernard, Haidenhain, Wood, and others. As to therapeutics, so far as giving doses of medicine is concerned, it, still in its very infancy, had its birth as exact science in physiological laboratories. Every modern textbook on the subject gives an account of the physiological action of each drug. What the future may have in store for us by pursuit of these inquiries it is hard to limit. The work of Bernard—showing that in curare we had a drug that would pick out of the whole body, and act upon, one special set of tissues, the endings of the nerve-fibres in muscle—and the results of subsequent exact experiments as to the precise action of many drugs upon individual organs or tissues, hold out before us a hope that perhaps at no very distant day the physician will know exactly, and in detail, what every drug he puts into his patient is going to do in him.

Pathology and therapeutics, while almost essential branches of physiological inquiry, have nevertheless their own special aim; and, now that the physiologists have proved that it is possible to study these subjects experimentally, special laboratories for their pursuit are being erected in Germany, France, and England. These laboratories are stocked with physiological instruments, and carry on their work by physiological methods. Those who guide them, and those who work in them, must be trained physiologists; if not, the whole business often degenerates into a mere slicing of tumors and putting up of pickled deformities: pathological anatomy is a very good and important thing in itself, but it is not *pathology*. Looking at the vast field of pathological and therapeutic research open to us, and bearing in mind the certainty of the rich harvest for mankind which will reward those who work on it, I regard as one of my chief duties here to prepare in sound physiological doctrine, and a knowledge of the methods of experiment, students who will afterwards enter laboratories of experimental pathology and pharmacology immediately connected with our medical school.

Reflex Uterine Vomiting.

Dr. Grailey Hewitt thus concludes a paper on this subject in the *Lancet*, January 5, 1884:

According to my experience, reflex uterine vomiting when of an obstinate character is very frequently associated with great weakness and want of tonicity of the uterus, and a flexed condition of the organ is almost invariably also present. There are undoubtedly cases of reflex uterine vomiting in which the cause is a different one, but they are exceptional, and occur rarely. The unduly soft uterus readily bends, and any temporary increase in the degree of the flexion is attended with aggravation of the reflex disturbance—viz., the vomiting. This is a fact with which observation of many cases has made me acquainted. The several factors concerned in the production of this grave disorder may be enumerated as follows:

1. A general enfeeblement of the body, the result of a low condition of the nutritive process, in which the uterus participates.
2. The physical weakness and pliability with which the uterus is consequently affected.
3. The flexed condition of the uterus, liable to

be intensified by certain movements or positions of the patient.

The sickness and vomiting appear to result from the irritation of the uterine nerves consequent on the temporary or permanent compression of the uterine tissues. It is almost certainly relieved, or for the time, at all events, removed, by measures having for their object the maintenance of the uterus in a normal position and shape. In two of the three cases above related, immediate relief was obtained from the treatment. The third is a case in which the condition of the ovary introduces a complication and increases the difficulty.

On the diagnosis of reflex uterine vomiting I may, in conclusion, add a few remarks. There is no doubt that many cases of this affection escape true recognition, the sickness being erroneously attributed to the liver or the stomach being the seat of disease. Many cases of so-called "bilious vomiting," and not a few supposed of gastric ulcer, turn out on investigation to be cases of uterine vomiting pure and simple. As regards the liver and the stomach, it will be found possible to exclude these organs as causes of the vomiting from the fact that apart from the vomiting there is no other symptom indicative of disease of the organs in question; while, on the other hand, there are generally marked symptoms indicating that the uterine functions are disturbed. One symptom specially indicative of the uterus as the cause of the sickness is the exaggeration of the sickness which is liable to occur when the patient moves or walks or exercises herself. It must be added also that in cases of reflex uterine vomiting, where the malady has been of long continuance, the stomach itself is liable to become affected. The secreting power of the stomach is enfeebled by the long-continued starvation; and it is no longer capable of producing gastric juice to any amount, which adds another factor to the pathology of such cases. Hence, a quasi-paralysis of the gastric mucous membrane; and I have seen cases of this kind in which the extremest care was necessary to prevent a fatal issue, even after the tendency to vomit had been obviated or diminished by appropriate treatment.

Bromide of Ethyl in Obstetrics.

The *American Jour. of Obstetrics*, January, 1884, tells us that Müller reported to the German Gynecological Society, that following in the wake of the experiments repeatedly made of late (especially by Heckermann, of Berlin, fifty cases), he has employed ethyl bromide in twenty-two cases of labor. The results were not as favorable as those obtained by H. The action is uncertain. M. employed it thirteen times in the second stage. In five of these cases the labor pains ceased altogether; in three, they ceased in part; in five, no effect was produced. The drug was used eight times during the whole course of labor: in two, the effect was very good; in four, the effect was temporary; in two, the pains were obtunded only in the first stage. On the average, fifty to sixty grams of the drug were employed. During the narcosis, the pupils dilated and the face became congested. Little effect was produced on the pulse and respiration. M. believes that the re-

tardation in the activity of the contractions is merely apparent. He has witnessed no post-partum hemorrhages and no mal-involution of the uterus.

Quite noteworthy is the fact that a very severe bronchitis set in during the puerperium in two of the cases. The purity of the drug was established by chemical examination. Perhaps the quantity employed (eighty grams) was too large.

Schatz (Rostock) said he was glad that the narcosis of the normal parturient had not thus far become the rule in Germany. The kymographion shows that chloroform narcosis considerably reduces the force of the contractions. He ascribes the large number of post-partum hemorrhages in England to the frequent employment of chloroform. He fears that similar drawbacks attend the use of bromide of ethyl.

Neugebauer (Warschau) called attention to some points in Heckermann's lecture, which he had heard in Berlin; he stated that Rose likewise had experimented with the drug. The latter objected to it because the odor of the expired air of persons anesthetized with bromide of ethyl was disagreeable to patients in the same ward.

Mueller stated that he, too, had noticed a garlicky odor in his patients, but it was never strong enough to be really objectionable. He added that the drug seemed to affect the fetus rapidly, the expired air of which likewise diffuses that odor.

Hegar had tried various anesthetics, but had always returned to chloroform. Ether may also be the cause of violent bronchitis which may be fatal to debilitated persons. Bichloride of methylene has the advantage that it has no depressant effect on the heart. Breisky has had one case of death from this drug. Chemical examination showed that the preparation was a mixture of chloroform and alcohol. H. likewise had his sample tested. The result was the same. He thinks it advisable to put the patient under chloroform toward the end of the second, but particularly of the first stage.

Mueller had also experimented with chloral (five grams). The pains were moderated in the first, but not in the second stage.

Trephining in Head Surgery.

Dr. S. H. Benton contributes an article on this subject in the *Proceedings of the Medical Society of the County of Kings*, which thus concludes:

The deductions I draw from my own experience in head injuries, are:

1. That almost all compound depressed fractures of the skull, without operative interference, are fatal.
2. That there is great danger in making a simple fracture of the skull compound, is more imaginary than real.
3. That the therapeutic method is negative, and a virtual surrender to death.
4. That the trephine, early used, is the best, and I think we can safely say the only agent in the hands of the surgeon to save life in these cases.

The after treatment forms no inconsiderable part in conducting our cases to a successful issue. I refer more especially to the local treatment.

There are no capital operations where antisept-

sis can be practiced with greater profit, not excepting abdominal surgery, and it should be carried out to the most minor detail. The agent I have used, in all my cases, has been carbolic acid.

I am careful to remove all spicula and bone dust from the wound. I remove all depressed fragments, unless I am satisfied that their attachment to the skull is broad enough so as that the nourishment shall not be interfered with. I take no chances in this respect.

The wound should not be drawn together by sutures, with the hope of securing union by first intention. You may, if you choose, draw the edges of the wound reasonably near together, but not quite.

There must be a chance for free drainage of the debris, if any be overlooked, as well as the natural products of inflammation, which, if confined, would undoubtedly produce the usual result, viz., septicæmia, and all that that implies. Some one has told us that "cleanliness is next to godliness," which, in these cases, as well as most cases of surgery, is true; therefore I keep the wound scrupulously clean, giving it my personal attention, and trusting to no nurse for this.

If any part of the brain should protrude later in the case, as usually occurs if the dura mater is much injured, I slice it off with the knife. This I find to be the best plan, as I have found it impossible to bring pressure enough to bear so as to press it back, and two or three times alarming head symptoms were produced by the effort. Astringents I have found useless. I have never seen ill effects follow the use of the knife.

The indications for internal medication in all my cases have been very few. They were all young and vigorous subjects, as well as temperate in habits.

No medicine was given, unless there was a present indication for its use—nothing for a possible future complication.

★ *Treves refers.* A New Disease.—*Actino-mycosis*. We find the following in the *Brit. Med. Jour.*, January 12, 1884:

Some little time ago a man living in a secluded country district, consulted Mr. Treves, of Margate, on account of a number of sores, which had made their appearance on the side of the neck and on the chest. The first sore had "come of itself," about two years ago, on the left side of the neck, just above the clavicle; subsequently the others appeared, one after the other, to the number of four, in an oblique line across the chest. The largest of these, the one nearest the primary sore, was the first to appear, and the others appeared as they were arranged, in series; there was also over the left side of the jaw, near the primary sore, another, pierced by a sinus leading down to the bone. The circumstances evidently suggested some infective process; the first sore was an excavated ulcer, with an irregular caseous-looking base, but the sores below this projected from the surface as much as half an inch in their centre, had a semi-gelatinous look, and an excoriated surface. Altogether, these latter sores rather resembled the small growths seen in some cases of sarcoma of the skin; but the case, taken as a whole, was evidently not one of sarcoma, and after due

consideration, Mr. Frederick Treves, of the London Hospital, to whose care the patient had been transferred, exhibited the patient at the Pathological Society, as probably a case of actino-mycosis. The disease has been known to veterinary surgeons as maxillary sarcoma, and the whitish tumor substance produced was the simple embryonic structure seen not only in some sarcomata, but also in the infective new growths. Bollinger had shown that the tumors contained in cavities in their interior little yellow bodies, which consisted of matted masses of mycelium. This fungus, from the peculiar radiate appearance presented by it in sections of the growth, he named actino-mycetes. Israel, of Berlin, first described the disease in man, and attributed it to a new form of fungus, but without apparently identifying it with the disease of cattle, as Ponfick did later. However this may be, there will, we imagine, be little question that this case now brought before the profession by Mr. Treves is the first which has been recognized in this country, that is, if the diagnosis which is at present made tentatively prove to be correct. On this point the only positively conclusive evidence is the discovery of the fungus; and on Saturday last, at the London Hospital, Mr. Treves examined the growths, which were distinctly pedunculated; and Mr. Watson Cheyne, who holds one of the Research Scholarships of the British Medical Association, will, we understand, make a complete examination.

Hygiene vs. Diphtheria.

In the *Cinn. Lan. and Clinic*, January 26, 1884, Dr. Mary J. Finley discusses the recent epidemic of diphtheria at Mansfield, Ohio, and thus concludes:

After a full consideration of all the facts which I have been able to gather, I can only arrive at the conclusion that neither sanitary conditions nor water supply, either originated the present outbreak of diphtheria in this city, contributed to its spread, or increased its virulence—except in so far as the cold, moist atmosphere from damp cellars conduces to catarrhal affections of the respiratory mucous membrane, rendering it weaker to resist the special contagion of diphtheria, and in so far as the general deterioration of vital processes induced by any impurity of air or water, renders the system less able to throw off the poison of disease, and less able to maintain its integrity until the disease shall have spent its force.

While the present report shows that there may be some connection between the malignancy of diphtheria and bad sanitation and impure water, yet the very multiplicity of the presumed unsanitary conditions precludes the possibility of ascribing a specific influence to any one of them. Well water, sewer gas, damp cellars, foul soil, rotting garbage, and filled lots, appear to have exerted an equal influence. Are we to suppose that the special poison of diphtheria is engendered by or finds its favorite nidus in each of these? Yet to each of them has been ascribed with as much justice the causation of various other diseases, typhoid, scarlet, and yellow fevers, dysentery, cholera, erysipelas. Must we believe that each of them possesses some half dozen different

poisons, each of which is at some time, for some unexplained reason, in the ascendant? Or shall we not rather believe that given the specific cause producing any epidemic disease, all factors which tend to a lowering of the standard of health render the individual more liable to succumb to its influence and less able to endure its effects?

A careful study of a number of reports on diphtheria in different parts of the United States and in other countries, has convinced me that epidemic diphtheria occurs with almost equal malignancy under the best and the worst sanitary conditions. The most desirable hygienic surroundings, and the most irreproachable water supply, afford no security against its attack.

The Treatment of Gangrene of the Lung.

After reciting a case, in the *Dublin Jour. Med. Sci.*, January 1884, Dr. Finny formulates the following propositions:

1. That the primary indication in cases of extensive gangrenous cavities is to prevent the putrid matter becoming a centre of infection, and thereby not only poisoning the whole system, but by its direct contact (a) causing an extension of the gangrene in the neighboring tissue of the lung, or (b) by being sucked into the bronchi of the other lung or other lobes of the same lung, inducing a gangrenous broncho-pneumonia. In the words of Hertz (*Ziemssen's Cyclop.*, Vol. V., p. 431) "the *indicatio morbi* also imperatively demands the evacuation of the sputa out of the cavity," and in connection with this I may mention that inversion of the patient's body, as in drowning, has been suggested.

2. That in cases of diffuse gangrene the probability of recovery is extremely small. Indeed, according to most observers diffuse gangrene from its nature runs an inevitably fatal course, and that therefore to attempt to cure such cases by antiseptics taken internally, such as tinct. eucalypti in 6-8 grm. doses a day (as advocated by M. Renaud in the *London Medical Record*, Vol. viii., 1880, p. 229), or by inhalations of carbolic acid, turpentine, etc., is but to dally with the disease and to give it greater head.

3. That under these circumstances it is a justifiable proceeding, if not the right treatment, to provide means of evacuating the cavity of its rotten and putrefying contents through the skin.

4. That the operation of incision and tapping of basic cavities in the lung is one which has been successfully performed with immediate benefit, and that when death has occurred in cases so operated on, death has not been directly due to the operation, but rather to its not having been thorough and efficient enough.

5. That in cases of diffuse gangrene of the middle or upper lobes, operative proceedings are quite as urgently, if not more urgently, called for as when it is of the lower lobe, since from the natural gravitation from the upper to the lower lobe there is greater risk of secondary infection of the dependent part.

6. That exploratory puncture and aspiration should be first attempted, and should the cavity be reached, immediate steps be taken for incision and tapping.

7. That the incision should be over the centre

of the cavity, as well as can be accurately determined, and wherever it approaches nearest to the chest wall, and it may thus occupy the anterior as well as the posterior wall of the chest.

8. That the question as to the mode of operation is one at present upon which opinions differ, though it seems to me advisable that an incision should be made only down to the intercostal muscles, and that afterwards a trocar and canula should be passed into the lung to a depth of 3-4 inches, and that a drainage-tube of sufficient size should be substituted for the canula.

The Use of Tobacco by Boys.

In the course of an article on this subject, Dr. Edward O. Otis (*Boston M. and S. Jour.*, January 31, 1884,) says:

The evil effects, then, of tobacco upon boys which can be said to have been fairly proved by observation, are:

1. An interference with and impairment of the general development, physically and mentally. Probably it does this by retarding progressive cell change, and impairing nutrition. In an adult, the development is attained, consequently he can smoke with impunity so far as this effect is concerned, when the boy only does it with injury.

2. The tobacco heart. This likewise happens to the adult, but is, I should think, more likely to happen to the youth, and with graver result, because his is such an unstable age physically. For this same reason, the other injurious effects are more liable to be intensified in the youth.

3. Defective muscular coördination. I have but little proof to show that this condition is more than temporary, continuing only while the tobacco is used.

4. It reduces the intellectual power of the boy. It does this either by opposing mental application and effort, or else by producing deterioration of the intellect, probably both to a greater or less extent.

5. It impairs the memory. What proof I have adduced seems to show that this is a permanent injury.

6. It may cause defective vision, and also irritation, more or less chronic, to the external parts of the eye.

7. It may unduly excite the sexual system, and lead on to excesses. I have no positive proof of this, but my observation among boys rather points to it.

8. Irritation of the mucous membranes of the mouth and throat, more especially in case of cigarette smoking.

9. It may impair digestion, and produce other derangements, such as habitual uneasiness, hypochondriasis, and so on.

The Radical Treatment of Nasal Catarrh.

The following report of his experience is given by Dr. P. M. Rixey, U. S. N., in the *Proceedings of the Naval Medical Society*, vol. i.:

"The radical treatment consists in the use of either chemical or surgical measures for the partial or entire removal of hypertrophy. The first consists in the use of various caustics, such as acetic acid, chromic acid, London paste, nitric

acid, and nitrate of silver, mentioned in the order in which I prefer to use them. My choice is acetic acid for hypertrophy situated in the nostril, or when these applications have to be made through the nostril; chromic acid to the posterior nares and vault of the pharynx. Nitric acid has to be used very carefully, owing to the difficulty in controlling its action. Nitrate of silver I consider, in the final result, more stimulative than destructive. Each application of the above escharotics only removes a superficial slough, and, consequently, numerous applications have to be made at intervals from five to ten days, and in the meantime sprays or douches have to be used daily to keep the parts clean. I soon came to the decision to use them only in those cases of moderate hypertrophy, and find something more radical in its immediate effect; this is found in the surgical treatment, which consists in the use of forceps, curette, snares, actual or electric cautery, and electrolysis. The forceps and curette I have used only a few times, and usually followed with caustic. The snare I prefer is the improved Jarvis, and it works admirably when the enlargement is considerable, whether anterior or posterior. The actual cautery I have not used, but find that in galvano-cautery I have an invaluable agent, and with the Flemming improved Seiler cautery, and the electrodes displayed here, we can reach almost any portion of the space. These knives can be heated to a bright red instantly by, as you see, a simple pressure of the thumb."

Lumbar Abscess with Peculiar Symptoms.

In the *Brit. Med. Jour.*, January 5, 1884, Mr. Stear relates the case of a medical man who died in June, 1883, aged 51. He had always been a strong man, and worked hard at his profession, without ever taking a holiday. During the last four months of 1882 it was noticed that he was thinner and looked aged, but he could ride twenty miles without fatigue. At the end of January he caught cold, and was confined to his bed with severe rheumatic pains in the right gluteal region. After a brisk purge he was better and able to get up, but he did not make much improvement. On February 5th he was seen with Dr. Latham, the symptoms being vomiting after dinner and pain in the hip and thigh. He left home for Ventnor, and afterwards went to Clifton, and returned home much emaciated and very weak. He was seen again by Dr. Latham, but no tumor or evidence of spinal disease could be discovered. On April 8th, Dr. Humphry opened an abscess which had been detected in the back, a large quantity of laudable pus escaping. The discharge continued until his death, on June 25th, from exhaustion. At the *post mortem* examination there was found to be extensive disease on the right side of the bodies of the second, third, and fourth lumbar vertebrae, and erosion of the transverse processes of all of them, extending half-way along the crest of the ileum. The iliacus muscle had disappeared, and its sheath was filled with pus. There was also pus in the psoas muscle. The cartilages were healthy. The stomach was dilated. All the other organs were healthy. Mr. Stear thought it probable that the spinal disease was caused by a fall from a horse, or at lawn-

tennis in 1882. The case was of interest from the deceptive nature of the cause of vomiting and emaciation, and from the fact that, although there must have been extensive disease of the vertebrae, he was able to carry on his work.

Rubbing in the Treatment of Diseases of the Eye.

The London Med. Record, November 15, 1883, says:

This subject had been brought before the Congress of Naples by Gradenigo; he again read a paper on it in the meeting of the Ophthalmological Association in Padua (*Atti della Assoc. Ottal. Ital.*; *Annali Univ. di Med.*, June, 1883). He considers rubbing, when used intelligently, a very valuable help in treatment. He had at first limited its employment to affections of the lids, but afterwards used it in affections of the eyeball, especially with the scope of diminishing tension. He related the case of a lady in whom, by this mechanical means, he cured a severe attack of exophthalmitis, accompanied by intense pain. He believes, as the result of his observations, that rubbing is useful in diseases of the lids, of the muscles, of the bulb with increased internal tension, and, lastly, in affections of the optic nerve itself in the orbital cavity, and perhaps even when there is effusion into its sheath. By rubbing, the venous circulation of the orbit and globe is favored, and in this way the beneficial action is exerted.

REVIEWS AND BOOK NOTICES

NOTES ON CURRENT MEDICAL LITERATURE.

—Two interesting reprints, that will prove very interesting reading and suggest much food for thought and reflection, have been received from the *Alienist and Neurologist* for January, 1884. The papers are by Dr. C. H. Hughes, of St. Louis, and are entitled, "The Opium Psycho-Neurosis—Chronic Meconism or Papaverism," and "Borderland Psychiatric Records—Prodromal Symptoms of Psychical Impairment."

—Messrs. Palliser, Palliser & Co., architects and publishers, Bridgeport, Conn., have issued a series of charts entitled "Palliser's Useful Details" (price \$3.00), giving a variety of useful designs for the construction and ornamentation of buildings. Their plans impress us as sensible, fresh, and decorative, and any of our readers who contemplate building will not regret acquainting themselves with the architectural suggestions and resources of this firm.

—In a reprint on the question, "Shall we Put Spectacles on Children," Dr. Julian J. Chisholm, of Baltimore, answers quite decidedly in the affirmative in all cases where a defective eye renders the sight imperfect. He combats the pre-

vailing notion, which he says is often supported by the family physician, that the use of spectacles at an early age tends to increase and strengthen the optical defect.

—In a reprint from the American Surgical Association, Dr. N. Senn, of Milwaukee, Wis., enters very fully into the treatment and general conditions of fractures of the neck of the femur, with special reference to obtaining bony union after intra-capsular fracture. He offers a new mechanical contrivance of his own, the results from which have been very satisfactory. The paper is well worth careful perusal.

—The report of the proceedings of the sixteenth annual meeting of the Society of the Army of the Tennessee makes a pamphlet of nearly 200 pages. It may be obtained of Gen. A. Hickenlooper, Cleveland, Ohio, and will doubtless interest those of our readers who served in that branch of the national forces.

—The *International Review of Medical and Surgical Technics* is a promising addition to medical literature. It is published quarterly, and is the official organ of the American Association of the Red Cross. Its editors are Drs. J. H. Warren, C. E. Warren, and W. E. Smith. It is published at Boston, 51 Union Park, and the price is \$3.00 a year. Its special field is everything new in the mechanical devices applicable to medicine and surgery.

—The operation of the extirpation of the uterus for cancer is severely condemned as unjustifiable by Dr. A. Reeves Jackson, of Chicago, in a paper before us. He sums up his impeachment of it in the following words:

1. Diagnosis of uterine cancer can not be made sufficiently early to insure its complete removal by extirpation of the uterus.
2. When the diagnosis can be established, there is no reasonable hope for a radical cure; and other methods of treatment far less dangerous than excision of the entire organ are equally effectual in ameliorating suffering, retarding the progress of the disease, and prolonging life.
3. Extirpation of the cancerous uterus is a highly dangerous operation, and neither lessens suffering—except in those whom it kills—nor gives reasonable promise of permanent cure in those who recover. Hence it fails in all the essentials of a beneficial operative procedure, and should not be adopted in modern surgery.

His examination of the statistics of the operation bears out fully these positions.

—The thirty-first annual report of the Children's Aid Society of New York City (No. 19 East Fourth street) gives a thoughtful person much food for reflection, and to the philanthropist a

glimpse of how wide is the field for charitable effort. In turning the leaves we have been impressed with the analysis of the causes of profligacy among girls, as stated by the experienced matron of one of the Girls' Lodging Houses. The passage is as follows:

What are the causes of so much ruin and destruction? The earliest is, we believe, foolish and immoral reading indulged in by girls, even before they are old enough to earn a living, and just when character is forming. This is the worm in the bud, which parents should watch more closely. Inordinate love of dress and inability to get it honestly sweeps off many. Idleness, ungoverned natures, and false pride, are fruitful sources of degeneracy. There is also a slackening of the sense of responsibility as to the kind of life followed, most serious in its results, as it takes away the motive for effort in the direction of industry and virtue. In the case of poorly-paid seryant girls other causes come in, but the great lack everywhere seems to be the right kind of personal influence.

We do not remember to have seen elsewhere such a positive charge against foolish reading (novels and story papers), but we have little doubt that it is correct.

BOOK NOTICES.

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THE DEPARTED FEE BILL.

Not long since, a correspondent in a distant state sent to us to obtain for him copies of the fee-bills of this and neighboring cities. We had to reply to him in a paraphrase of the needy knife-grinder of Anti-Jacobin renown—"Fee-bill, God bless you, we have none to show, sir!"

The time was when a printed document of that kind was gravely determined upon at a society meeting, and carefully laid away in the office drawer, to be produced for its effect on grumblers who made a fuss about the physician's charges. That was its principal if not only use, for as a rule to the physician himself in making his charges, it was far more honored in the breach than in the observance. At last it disappeared even as an empty formality, and every doctor was left free to charge little or much, which was generally pretty closely governed by what he thought he could get.

There seems no other way of regulating charges. So much depends on the personal skill of the individual, the demands upon his time, the nature of his specialty, the class in life of his patient, the intricacy or simplicity of a given operation, and other such variable factors, that it becomes practically impossible to lay down any one rule, and still more impossible to have a rule respected.

Unpleasant consequences result from this occasionally. Persons, especially heirs, may object to charges as excessive; and as no established tariff can be shown, the only ultimate appeal is to a jury. One physician obtains a reputation for excessive charges, which another may take advantage of. The young practitioner is often at a loss what to estimate his services at; while the one who is in the hey-day of his fame may be, and often is, extortionate. Having nothing to instruct him as to what a physician should ask, the patient or his friends may be forced to make a bargain beforehand, and the physician has to chaffer in a manner not agreeable to him nor advantageous to his dignity.

The general custom of the profession in a given community may be arrived at, but it is no sort of

guide for particular instances. More frequently, however, the doctor receives less rather than more than a fair average return for his labor.

While we regret the decadence of the fee-bill, we recognize it as a necessary loss in populous and active centres. It may survive in rural and stationary populations, but it cannot be resuscitated in the great cities. There the "personal equation" comes into the sum too much to allow it to be represented by any fixed figures. The fee-bill is a reminiscence, which belongs no longer to the present day.

AN APPEAL TO THE PROFESSION.

Last month a circular letter was sent to a number of physicians in this city, and a second of similar tenor to the county medical societies of this State, asking contributions to a fund to recompense Dr. William S. Forbes for the expenses incurred in defending himself in a suit brought against him last winter. The circular explains the whole matter, as follows :

It is generally known to the profession throughout the State of Pennsylvania that Dr. William S. Forbes, while in the discharge of his official duties as Demonstrator of Anatomy in the Jefferson Medical College, was subjected to a very unjust and expensive suit at law, under the charge of having violated a private cemetery for the purpose of procuring dissecting material. The result of the prosecution was his complete vindication.

Independently of the personal annoyance and the professional damage sustained, in consequence of the groundless indictment, Dr. Forbes was compelled to incur, in defending his character, heavy expenses, amounting to nearly four thousand dollars. As the suit was instituted while he was acting, not in the capacity of a private teacher, but in the interest and service of a public institution and of the profession in general, it seems unfair that he should be compelled to bear this burden alone. It has been suggested by several members of the medical profession that some measures should be adopted to indemnify Dr. Forbes against the pecuniary loss sustained.

To effect this object, it has been thought best to appeal to the different County Societies of the State, soliciting their co-operation in this matter. If these Societies, or their individual members, acting in concert with the profession of Philadelphia, will contribute to the general fund

such amounts as they may see proper, it is probable that Dr. Forbes can be reimbursed. It is hoped that a very general subscription, of even small amounts, will testify to the feelings of the profession in this matter.

If this project meets your approbation, kindly give it your support in your County Society, where we hope the subject will be presented at an early date.

Contributions may be sent to either of the undersigned :

DR. D. HAYES AGNEW, 1611 Chestnut St.,
DR. RICHARD J. LEVIE, 1601 Walnut St.,
Committee.
DR. J. WILLIAM WHITE, 222 S. 16th St.,
Treasurer.

This appeal to the profession will, we hope, meet a prompt and satisfactory response. To allow Dr. Forbes to bear this burden alone would be most unjust. As we took occasion to point out at the time, his action throughout the whole history of the occurrence was not only correct, but praiseworthy ; and when a false sentiment based on false information pushed the charge to a decision in open court, it was in his favor, and vindicated him completely.

There is another aspect of the case to which we then alluded, and which also cannot fail to suggest itself to the reader of the above circular. It will be observed that Dr. Forbes incurred this unfounded charge and sacrificed a large sum in defending himself against it, "not in the capacity of a private teacher, but in the interest and service of a public institution."

Why has not that "public institution" paid this bill of costs? Is it poor? No; it is wealthy, probably having the largest income of any medical college in America.

Do the names of any of its officers appear on this appeal for the sum needed to protect one of its own instructors? Not one.

It may easily be guessed that there is a history beneath this action. Let not the position which belongs to them prejudice the cause which is here brought before the professional public. While primarily the duty of aiding Dr. Forbes rests on the institution to which he was attached, it now rests on the profession to which he belongs, and we ask for it prompt and liberal reception.

DYSPEPSIA A SYMPTOM OF KIDNEY DISEASE.

We desire to call special attention to the extract from a lecture by Dr. Da Costa, published on another page, because what it teaches is most important, and is well worthy of being carefully stored up in the mind, and kept before us in our daily work.

Derangements of digestion are very common in all organic diseases, but it seems that they are particularly liable to be present in the various forms of kidney disease, grouped together and generally known as "Bright's Disease."

We have known many cases that have lasted, no doubt, for years, and in which the only symptom that presented itself to the attention of the patient up to within a very short time of a fatal termination, was an obstinate "dyspepsia," that no drugs nor precautions in eating, nor hygienic measures of any kind, no matter how conscientiously carried out, could relieve. Whether the prolonged faulty digestion and consequent assimilation of imperfectly prepared nourishment has caused the changes in the kidney tissue, or whether the impaired action of the kidneys and the consequent retention of excrementitious matter in the system has caused the dyspepsia, or in other words, the relationship of cause and effect between the dyspepsia and the kidney disease, we do not know, and neither is it of much practical importance that we should know. One theory that has been advanced as to the etiology of Bright's disease, holds that owing to faulty preparation the blood albumen is really unfit to remain in the blood, it is excrementitious and must be removed, and that the irritation caused to the kidneys in performing this work, results in an inflammation and degeneration of their structure. If this be true, then we might reasonably suspect that the dyspepsia may act as a cause. But for our practical purposes, we say again, it makes no difference which is the cause and which the effect.

The point that we wish to make is that dyspepsia is frequently the only symptom or sign of chronic Bright's disease that makes itself manifest to the patient, and that when we are called

upon to treat a case of chronic dyspepsia, which baffles our skill and resists the treatment that *ought* to cure it, it will be in order to make a careful examination of the urine. It will unravel many a mysterious case, and help us much in our treatment.

METHODS OF STUDY OF INEBRIETY.

In spite of the enormous amount of discussion about temperance and intemperance, there is a sad lack of solid knowledge as to the causes and effects of inebriety. There has been too much sentiment, and too little cold, accurate observation on the matter. An attempt is now commenced by putting a series of questions to physicians, of a kind to elicit the information requisite to get at the truth.

These inquiries are put by the American Association for the Cure of Inebriates, which was organized in 1870 for the purpose of studying the nature and causes of inebriety from a purely scientific standpoint.

The purpose of these questions is to gather the practical experience and observation of leading members of the medical profession, as a basis for a more accurate knowledge of the nature and character of inebriety.

We believe our readers will be glad to see what they are. They run as follows:

What particular mental and physical changes have you noticed concerning the character and general health of the inebriate, that would suggest the idea of disease and the need of physical care and treatment?

Have you noticed any form or condition of inebriety that seems to be produced or is largely influenced by the kind of alcoholic drink used, or the work engaged in, or the food or climate, or any other unsanitary surroundings?

Can you give any facts from observation, bearing on the heredity of inebriety; particularly as to the presence of insanity, epilepsy, phthisis, inebriety, or other neuroses in the parents or relatives of inebriates?

Give cases with histories, if possible.

Have you seen any cases in which insanity or epilepsy either preceded or followed inebriety? If so, was it traced to the use of alcohol alone, or was it due in part, or in whole, to some inherited or acquired diathesis?

Can you give any history of inebriates whose drinking dated from or was influenced by head injuries, sunstroke, syphilis; or could be traced to mental shock, disease or injury of any kind; also to over-work, nervous exhaustion, anemia, and any specific causes which broke down or injured the system?

Have you noted any distinction between the different

forms of inebriety, such as irregular, continuous, or periodical inebriety? State any facts you have noticed which relate to the periods and forms of drinking.

Illustrative cases concerning any of these inquiries will be welcome, and a full expression of opinion from observation and experience is urgently requested.

The Secretary of the committee, to whom answers should be addressed, is Dr. T. D. Crothers, Hartford, Conn.

It will be seen that the investigation is directed to the classification of the varieties of inebriety; and that the etiology of the condition is to be studied from other points of view from those heretofore received. The necessity of this is obvious. Even among the better educated of the medical profession there remain some who are unwilling to look upon inebriety as a disease, but persist in regarding it as a crime, to be treated rather by religious measures than by therapeutic agents.

We have little doubt but that the many questions relating to intemperance will be considered in a more efficient manner by such investigations as the above.

ANTI-VIVISECTION.

It is with regret that we have to chronicle the appearance of the anti-vivisection fanaticism in our midst.

A meeting was recently held in this city for the purpose of arousing the interest of the public in the question, and to our surprise it was attended by physicians who made speeches in behalf of the movement.

Tenderness toward the brute creation, sympathy with suffering animals, and a desire to prevent the unnecessary infliction of pain, is a sentiment well worthy of the heart of man, and one that is deeply implanted in the being of every gentleman. But to any one who realizes how absolutely necessary to the progress of medical science is the practice of vivisection, it seems almost inconceivable that any one would wish to prohibit it.

We fully agree with those who would restrict its use within certain limits, limits that would insure the saving of ten thousand pains to humanity for every single pain inflicted on a lower animal; as, for instance, requiring a certain au-

thority, as a license to practice vivisection, procurable (without expense) only by those who can furnish satisfactory evidence that their physiological studies have progressed sufficiently far to make it reasonably sure that the results of their experiments on animals will redound to the good of mankind.

Without going into details, let us ask ourselves how much we would know about physiology to-day were it not for vivisection; and let the answer that must come to the mind of every unbiased person serve as his argument against and condemnation of the anti-vivisection excitement.

To prohibit the inevitable is only to make it still more inevitable, if possible. That the ardent student of physiology *will* experiment upon the lower animals, is just as certain as that the ardent lover of alcohol *will* drink whisky, prohibit it as much as you choose. Therefore, let these well-meaning persons avoid putting a premium upon lawlessness, by endeavoring to prohibit that which *will* be done in spite of all prohibition.

NOTES AND COMMENTS.

Sudden Death after Quinine.

Especially in cases of typhoid fever, it has often been contended that large doses of quinine are responsible for sudden deaths in that disease, when administered to a typhoid patient with a weak heart. This observation was originally made by Hardy. Laborde (Schmidt, *Jahrb.* 28, 1883,) has investigated the effect of quinia on the heart to determine the truth of Hardy's assertion. He found that large doses of quinine may cause cessation of the action of the heart in a double manner: by hyper-irritation (hyperexcitation inhibitoire), or by functional exhaustion in consequence of the ataxic phenomena or the arrhythmia and of asystoly.

L.'s experiments, which have been instituted with great care, excluding every possible error, seem to prove, indeed, that there is a connection between the sudden deaths in typhoid and other low fevers, by heart or respiratory syncope, and large doses of quinine. The effect may be produced in a double manner, either by the heart itself being suffering (as usually is the case in these fevers), or by affection of the kidneys, when, in consequence of diminished excretory power of the

latter the excretion of the quinine is retarded, and its dangerous effect upon the heart is increased thereby.

What has been said of quinine, has reference also to cinchonin, only, that in this case the primary spasmodic effect of the latter influences the function of the heart in such a way as to increase the ataxic disturbances and the tetanizing effect to their maximum, without calculating the grave disturbances in connection therewith, which generally cause a mechanical, mostly fatal, asphyxia. The administration of cinchonin instead of quinine, or the adulteration of the latter by the former (in Paris hospitals such has been discovered up to 40 p. c.), is by no means indifferent.

Apropos of these investigations, L. draws the attention to another, yet more dangerous, adulteration of quinine, viz., that with cinchonamin, an alkaloid which differs from cinchonin by being composed of two atoms more water, and by being very much cheaper, and which is found in combination with cinchonin (never with quinine nor cinchonoidin), especially in the *remija purdiana*. Into a fat rabbit a hypodermic injection was made of four grains of sulphate of cinchonamin. As if struck by lightning, the animal dropped on its side, stretched once its legs, and was dead; while after an injection of the same quantity of cinchonin death would not have taken place under less than one hour and a half, and then under symptoms of violent epileptiform convulsions.

Certainly this fact proves the great difference in the effect of these alkaloids. It is the old story. Some authors report never to have met with fatal cases in the application of certain drugs; others, equally trustworthy, insist upon their having done so. It would seem almost as if in such cases we may safely say, that the first, perchance, had procured a pure, the last an adulterated drug. It is another lesson for us to be careful of whom we buy our remedies, and never to endeavor to buy the cheapest, but always the best and purest article. To be sure, a chemical analysis will detect the swindle: but this discovery is sometimes exceedingly difficult for the expert chemist; how much more—aside from the inconvenience—must it be for the practicing physician, who cannot be *master of a sister science*.

Nerve-Stretching in Locomotor Ataxia.

Prof. W. Stokes, of Dublin, has resorted to this procedure in two cases with rather satisfactory results. In the first case the success was sufficiently encouraging. The operation was followed by the restoration of plantar sensibility, by

marked diminution both in frequency and intensity of the shooting pains, and by temporary relief from vesical irritability. There was no return, however, of the patellar reflex, no improvement in locomotive power, and no change in the muscular incoördination. The force employed was estimated roughly at about eight or ten pounds. Antiseptics were used, and the wound, though slow in healing, was always aseptic. In the second case both sciatic nerves were stretched, and very marked and abiding were the beneficial effects, although "severe constant pains at the situation of the operation, accompanied by spasmodic contraction of the muscles of the leg, were complained of by the patient for some hours after the operation." The lightning pains were absolutely abolished; there was temporary increase of power in the legs, and the urinary troubles were abated. Professor Stokes remarks that the *rationale* of the treatment remains as yet unexplained, although he admits a possible solution of the problem based on the observations of Drs. Brown-Séquard and Bastian, that the operation produces "a certain amount of vaso-motor paralysis resulting in vascularity and increased temperature, and that these may lead to improved nutrition of the affected part." Professor Stokes differs from Mr. Marshall as to the advisability of using a dynamometer to estimate the force exerted, since he has decided to employ it in future operations. Professor Stokes' experience leads him to the conclusion that a force of ten pounds is sufficient for the sciatic nerve. Mr. Marshall thinks one of thirty pounds is a very safe one. Both assert eighty-eight pounds, the maximum fixed by M. Artant, to be replete with danger.

Iodide of Potassium an Anti-Galactagogue.

In the *Brit. Med. Jour.*, January 5, 1884, Dr. I. Jenner Verrall writes: "In a recent case of excessive secretion of milk after weaning, I have found the above drug of great service. The child had been weaned more than a week, and the breasts were very large, hard, and tender. Belladonna and aconite, applied freely, together and singly, had failed; this, although combined with firm compression of the breasts by a bandage, and the administration of salines and purgatives—a form of treatment generally successful. Ten grains of iodide of potassium were taken three times a day, and decided relief was obtained after the fourth dose. In all, 160 grains were taken, and then all trace of swelling had disappeared. With each dose I gave half a grain of quinine, as I always do when giving the iodide in rather large

doses. There was no symptom of iodism. Before taking the drug internally, my patient had used the iodide and soap liniment for two days without much benefit, and continued to use it till treatment ceased.

"As long ago as 1858, Roussel, and, in 1861, Delmas, recommended the iodide, and were supported by Dr. Morris, of Cheltenham, in 1864. Dr. Dolan, however, in the *Practitioner* of 1881, quotes Dr. Morris, but reports that the drug, given by himself in larger doses than Dr. Morris had used—namely, fifteen grains against a drachm—had produced no effect. At the time of my case, I had not seen these papers, and was led to use the iodide solely on account of its known action on glandular tissues. I could find no mention of it in Ringer, Woods, Bartholow, or Phillips."

Salicylic Acid a Cure for Tic Douloureux.

We frequently meet in our practice cases of tic douloureux, that often so exceedingly painful neuralgia of the fifth nerve, where an operation seems to promise the only radical cure. If we hear of a remedy which is said to have the same effect as the surgical interference, we become doubtful; but if no less reliable an authority than Prof. Nussbaum (*Munich, Aertzl. Intelligenzbl.*, 38, 1883,) assures us of the fact, our hope increases. Recently a number of such cases had been sent to N. for the purpose of having the operation performed, and after a number of carefully instituted experiments, this great surgeon recommends a trial with salicylic acid before proceeding to stretching or to resection of the nerve. In all the recently-sent cases he first tried this remedy, and he found it in every one a radical cure; not only a palliative effect, but really an utter disappearance of the painful disease was the result in every case. Especially in cases of rheumatic nature, N. is positive of having discovered in salicylic acid a specific for tic douloureux. He administered the drug in the following manner:

R. Acidii salicylici, 0.2,	gr. 3½.
Sodii salicylatis, 2.0,	gr. 32.
M. ft. pulv.	

Within 24 hours the patient takes from 4 to 6 of such powders.

Pulverized Vaccine Matter.

An important discovery by Dr. Reissner promises to do away with all scarcity of vaccine matter in the future. It offers few difficulties, and every country physician can provide himself with a practically unlimited quantity of the purest animal vaccine virus, at a nominal expense.

A calf is vaccinated with pure virus, and after five full days, the pustules are taken off with a pair of forceps, and shaved with a lancet and pressed so as to obtain all the fluid lymph contained. This lymph is spread on glass plates and placed in a sulphuric-acid exsiccator, where it remains one or two days. It is then taken out, pulverized in a mortar, and replaced in the exsiccator till wanted, when it is mixed with a little water or glycerine.

Thus prepared, the virus from one calf will vaccinate 2,000 to 3,000 persons. The calf is as well as ever in a few days, and the physician is provided with the purest of bovine virus for an indefinite period.

The National Board of Health.

Our contemporary, the *Boston Medical and Surgical Journal*, is hard on this respectable but prematurely exhausted body. It says:

"In any other country than the United States, the resignation of its members would have been placed in the President's hands. * * * Thirty pages out of the one hundred and two of the report before us [are] devoted to the old quarrel with the Louisiana Board of Health, and which probably few people are interested to hear now."

The *Journal* advises the National Board of Health to confine their energies to internal matters, and to work in harmony with the Marine Hospital Service, who may be given the quarantine. They have, however, a field for themselves in the study of statistics and the abstract branches of medical science, as we pointed out a year ago. These would return better fruit than quarrels about precedence.

Mullein Leaves in Phthisis.

A correspondent of long experience in the profession writes us:

"Having seen the mullein referred to as a remedy for phthisis, I am led to tell you that I first saw the remedy suggested in the M. AND S. REPORTER about 1855, to be smoked in a pipe. At that time I was a young practitioner in Sussex county, Del., and the wife of the landlord with whom I boarded belonging to a family of consumptives, and having repeated attacks of catarrh with profuse expectoration, was thought to be in great danger of the disease. She was then about 35 years old, and quite a smoker. I recommended her to get mullein and dry it, and mix it with her tobacco for smoking. From this she derived great benefit, and kept up the practice for many years. Her death occurred some years since, but I do not

know the cause. I have recommended the use of the mullein to many others, but I have never known it followed up so well as in the case of the lady mentioned. I feel sure that her life was prolonged by its use."

Sulphuric Ether as an Anæsthetic.

No other anæsthetic than sulphuric ether is used in the hospitals of Naples, Lyons, and Geneva. Dr. J. R. Comte, of the last-named city, has recently published some facts gathered from the three named.

The ether must never exceed a specific gravity of 0.725 at 15°C., and must have no acid reaction and no trace of fusel oils.

With such, 100 cubic cent. will produce anæsthesia in an average of six minutes. The ether must be inhaled in full doses and concentrated. The pulse rises to 110-140 per minute. The temperature invariably falls, the urine diminishes in quantity and falls in specific gravity. Small injections of morphia are occasionally beneficial to control excitation. Nothing special is recommended against the vomiting.

Intestinal Worms a Cause of Invagination.

From the *Rev. Med.* we learn that in a number of autopsies practiced upon animals dying with symptoms of intestinal occlusion, M. Mégnin found in a certain number that the obstruction was due to intussusception. In nearly all these cases he found a large number of ascarides in the intestine, and thought that the irritation caused by their presence had induced such energetic peristaltic movements as to force a portion of the small intestine through the cæcal valve. The usually accepted causes of invagination are defective hygiene and enteritis, and it is probable that the intussusception in these cases was referable to an enteritis set up by the presence of large quantities of the lumbricoids, rather than to simple irritation.

The Influence of Spices on Digestion.

Hasson has been making some experiments on this question, which he publishes in the *Wiener Med. Blät.* He has carried out his experiments with artificial gastric juice, in which he has placed meat which had lain for four days in wine, vinegar, oil, charcoal, and common salt respectively. The meat which had been immersed in white wine dissolved the most rapidly, that in vinegar, oil, and charcoal just as quickly as fresh meat, while the salt meat was much more difficult to dissolve. He then experimented on the influ-

ence of salt, and found that small quantities hastened digestion, but that a larger amount retarded it. Acetic acid seemed to hasten digestion in exact proportion to the dose.

Relations of Menstruation to Ovulation.

The recent researches on this subject by Prof. Leopold (in the *Archiv für Gynækologie*) result in showing that ovulation may take place without menstruation. In fact, the latter does not directly depend on the former, but only indirectly. The immediate exciting cause of the congestion which leads to the menstrual flow is not the expulsion of the ovum, but the formation of new cells in the ovary, which leads to a general congestion of the genital tract and may or may not result in the ripening of an ovule. Prof. Leopold, however, acknowledges that the facts obtained are not sufficient to establish a positive theory.

Helenin as an Expectorant.

A late issue of *El Siglo Medico* contains an article by Dr. F. Valenzuela, urging the value of helenin in bronchitis (chronic), broncho-pneumonia, and tuberculosis, for controlling the cough and facilitating expectoration. In whooping-cough he has also found it "surprisingly efficient." It is not a narcotic, and both appetite and digestion improve under its use. The dose he gives is five drops of the tincture three times a day—but he neglects to add the strength of the tincture employed.

Nervous Dyspepsia.

We had recently occasion to say a few words about this condition, and it affords us pleasure now to note that Gallerani (*Rivista Clinica*) has had some experience with a similar condition. In his case the trouble was of two years' duration, and he cured it with belladonna. He gave two-fifths of a grain of extract of belladonna divided into two doses, one to be taken an hour before luncheon, and the other an hour before dinner, during the first three days of treatment. This dose was increased to three-fifths of a grain daily during the last four days.

Digitalis in Dropsy from Heart Failure.

Two cases reported in the *Canada Med. and Surg. Jour.*, January, 1884, afford excellent examples of the good results to be obtained from digitalis in the dropsy of heart-failure. In the first case, the man's condition was desperate. On three several occasions he was rescued from a state of extreme danger and great suffering by prompt treatment,

and was restored for a considerable time to comparative comfort and activity. The autopsy showed absence of any disease of the valve curtains, but great enlargement of the auriculo-ventricular opening. One drachm of infusion of digitalis with bitartrate of potash and spirits of chloroform were given thrice daily.

Water Dressings for Wounds.

Listerism means cleanliness; hence, when Dr. J. J. Larkin gives a thrust at Listerism in the *Pt. Wayne Jour. Med. Sci.* for January 1884, delicate though it is, and then goes on to describe his cold water dressing, it seems rather paradoxical, since his recommendation really embodies Listerism, because it advocates cleanliness. He has had most satisfactory results in incised wounds and amputations, with dressings of cold water with *one-half per cent. of carbolic acid*. Cold contracts the blood and absorbent vessels, prevents swelling and pain, and consequently inflammatory actions; water soothes, cleanses and facilitates drainage; rest is the only condition remaining to complete the best plan for recovery.

Fatal Traction on the Umbilical Cord.

In view of the case reported to the *Med. Record* by Dr. George Huntington, it will be well to give the stern injunction, "Hands off," to the army of officious and meddlesome women who are always on hand at a country accouchement. He was called to a woman in labor, and when he arrived found her dead. The child had been delivered spontaneously, and some fussy woman had pulled on the cord until she had inverted the uterus, and the woman died from hemorrhage.

Electricity for Ovarian Pain.

From the *Rev. de Therap.*, we learn that Mr. Apostoli makes use of a faradic stream of high tension, applied to the uterus, either by means of a double uterine electrode, or of an electrode pushed into the vagina, the other being placed on the hypogastrium. The stream must never be powerful enough to excite pain; the sittings must generally be repeated daily, and last about ten minutes.

A Cause of Blindness.

In the course of an article in the *Am. Practitioner* for January 1884, Dr. E. Williams says that in endocarditis or arteritis, and in women exhausted by puerperal hemorrhage, a coagulum may drift into the main artery of the retina and cause in-

stantaneous blindness. Recovery of sight after such accident is almost impossible.

Carbonic Acid in Whooping Cough.

Inhalations of carbonic acid are recommended by several authorities in the *Rev. de Therap.*, December 15, 1883. It is obtained from an apparatus for making Seltzer water, and was slowly inhaled through a long rubber tube placed at the nasal orifices.

NEWS AND MISCELLANY.

New York State Medical Society.

The seventy-eighth annual meeting of this Society was held in Albany February 5, 6, and 7. The Inaugural Address was delivered by the President, Dr. Alexander Hutchins, of Brooklyn. Dr. Wesley M. Carpenter read a very interesting biographical sketch of Dr. J. Marion Sims, after which Dr. J. P. Creveling, of Auburn, read a short paper on "Double Hare Lip." The following papers then followed: "Two Unusual Cases in Obstetrical Practice," by Dr. W. C. Wey, of Elmira; "Prophylaxis of Summer Complaint in Infants," by Dr. David Little, of Rochester; "Neuber's Deep Canulization in Amputation of the Female Breast," by Dr. A. G. Gerster; "An Operation for Correcting Deformity of the Auricle," by Dr. O. D. Pomeroy, of New York; "Poisoning by Potassium Chlorate," by Dr. George B. Fowler; "The Establishment of Hospitals in Small Cities," by Dr. Parker, of Poughkeepsie; "A New Method of Partial Extirpation of the Cancerous Uterus," by Dr. Van de Warker, of Syracuse; "The Value of Electricity in Diagnosis," by Dr. L. E. Felton, of Potsdam; "Congenital Lipoma," by Dr. A. Jacobi; "Orbital Cellulitis," by Dr. T. R. Poole; "A Plea for the Pharmacopoeia," by Dr. Laurence Johnson; "Operations for Closure of the Hard and Soft Palate," by Dr. Vanderveer, of Albany; "Sympathetic Ophthalmia," by Dr. David Webster, of New York; "The Value of Horse-hair as a Means of Drainage," by Dr. Daniel Lewis; "Dysmenorrhœa, its Treatment by Dilatation," by Dr. W. W. Potter, of Buffalo; "Two Cases of Rupture of the Heart, with Pathological Specimens," by Dr. T. H. Squire, of Elmira; "Biographical Sketch of James Rushmore Wood, M. D., LL. D.," by Dr. Frederick S. Dennis; "Biographical Sketch of the late Dr. G. W. Bradford," by Dr. E. C. Green, of Homer; "Biographical Sketch of the late Dr. J. F. Jenkins," by Dr. G. J. Fisher, of Sing Sing; "The Medical Society of the State of New York in its Relation to Science," by Dr. E. Harris, of Albany; "Biographical Sketch of Dr. Jas. S. Bailey," by Dr. F. C. Curtis, of Albany; "House Sanitation, as It Is and as It Should Be," by Dr. W. F. Sheehan, of Rochester; "The Mechanical Treatment of Hip-joint Disease," by Dr. Milton J. Roberts, of New York; "Synovitis of the Knee and Ankle Joints," by Dr. A. M. Phelps, of Chateaugay; "Morbid Drowsiness and Somnolence," by Dr. C. L. Dana, of New York; "The

Management of Face Presentations," by Dr. E. L. Partridge, of New York; "Arsenic and Digitalis in Phthisis," by Dr. A. Jacobi, of New York; "Two Cases of Poisoning by Tansy," by Dr. W. Woodward, of Big Flats; "Sympathetic Serous Iritis," by Dr. Webster, of New York; "Forster's Method of Ripening Cataract," by Dr. Mitten-dorf; "Spontaneous Pyæmia," by Dr. J. B. Todd, of Parish; "Care and Preservation of Medical Pamphlets," by Dr. J. G. Fisher, of Sing Sing; "Strangulated Hernia, Five Cases Treated by Operation," by Dr. J. Chapman, of Medina; "Notes on the Treatment of Diseases of the Digestive Organs," by Dr. F. A. Castle, of New York; "Hay Fever," by Dr. J. O. Roe, of Rochester; "The Cure of Spinal Caries without Deformity," by Dr. M. Josiah Roberts, of New York.

After some discussion, the question of repealing the new code and going back to the code of the American Medical Association was put to vote, which resulted in 105 in favor of the repeal and 125 against it; thus dooming the New York State Society to another year of professional ostracism.

Dr. A. Jacobi, of New York, offered a resolution calling the attention of Congress to the importance of the speedy passage of the bill providing for the erection of a fire-proof building for the medical department of the army. The resolution was adopted, and it was ordered that it should be sent to the proper committee, attested by the seal of the Society and the signatures of the President and Secretary.

The Committee on Prize Essays reported that there had been two essays submitted:

1. "Tuberculosis of the Breast," by Dr. Ghislandi Durant, of New York, for which the Cash Prize was awarded.

2. "Consumption," which was thought worthy of publication.

Dr. Powers, of Ontario, Canada, made some remarks in regard to an Act regulating the practice of medicine, recently passed in Ontario. The Act requires an examination previous to matriculation, four years of study at a medical college, and the examination by a board independent of all teaching bodies. No degree from any part of the world will license a person to practice in Ontario.

Dr. Jacobi, of New York, from the Committee to Coöperate with the Society for the Prevention of Cruelty to Children, reported that a hospital for diphtheria and scarlet fever had been organized in New York, and would soon be ready for occupation. The committee offered the following resolution, which was adopted:

Resolved, That the State Medical Society deeply regrets the failure of the Legislature last year to enact the law proposed by its committee for the protection of children engaged in factory work, and respectfully commends the subject to the attention of the present Legislature, with the hope that definite action will be had in the matter, which is of grave importance and deep interest to all humane persons.

The Nominating Committee then presented the following report, which was adopted:

President.—Dr. B. F. Sherman, of Ogdensburgh.
Secretary.—Dr. William M. Smith, of Syracuse.
Treasurer.—Dr. Charles H. Porter, of Albany.
Censors.—*Southern District*: Drs. F. A. Castle,

Geo. H. Fox, D. Webster. *Eastern District*: Drs. E. D. Fergusson, N. L. Snow, LeRoy McLean.
Middle District: Drs. A. Churchill, J. K. Chamberlayne, Frazer. *Western District*: Drs. T. F. Rochester, B. L. Hovey, T. Dimon.

Committee on Ethics.—Drs. A. Jacobi, A. Mathewson, C. E. Whitbeck.

Honorary Member.—Dr. William G. Bronson, of Connecticut.

Adjourned.

The Veterinary Department of the University of Pennsylvania.

This new department is now organized. The faculty includes William Pepper, M. D., LL. D., Provost of the University and *ex-officio* President; Rush Shippin Huidekoper, M. D., V. S., Dean, Professor of Internal Pathology, and *pro tempore* Professor of Veterinary Anatomy; James Tyson, M. D., Professor of General Pathology and Morbid Anatomy; Horatio C. Wood, M. D., LL. D., Professor of Materia Medica, Pharmacy, and General Therapeutics; Theodore G. Wormley, M. D., LL. D., Professor of Chemistry and Toxicology; Harrison Allen, M. D., Professor of Physiology; Joseph T. Rothrock, M. D., B. S., Professor of Botany; Andrew J. Parker, M. D., Ph. D., Professor of Comparative Anatomy and Zoölogy; Robert Meade Smith, M. D., Professor of Comparative Physiology; ———, Professor of Surgical Pathology and Obstetrics; Adolph W. Miller, M. D., Ph. D., Demonstrator of Pharmacy; Henry F. Formad, M. D., B. S., Demonstrator of Pathology and Morbid Anatomy.

The course of study extends over three years, the year beginning on October 1 and ending on June 15. The requirements for admission to this Department are the same as for the Department of Medicine. The studies are for—

First Year.—Chemistry, Materia Medica and Pharmacy, Physiology, Histology, Botany, Zoölogy, Veterinary Anatomy, and Forging.

Second Year.—Medical Chemistry, Physiology, Therapeutics, General Pathology and Morbid Anatomy, Veterinary Anatomy, Surgical Pathology, Internal Pathology and the Contagious Diseases, Botany, and Zoölogy.

Third Year.—Therapeutics, General Pathology and Morbid Anatomy, Surgical Pathology and Operative Surgery, Internal Pathology and the Contagious Diseases, Sanitary Police, Obstetrics, and Zoötechnics.

In the second year the student will attend clinics, and will serve as aid in the hospital; in the third year, he will be placed in charge of sick animals, and be required to prepare clinical reports and make autopsies. He will also make regular visits to breeding and dairy farms and to slaughter-houses, in order to familiarize himself with the races of animals, the economical means employed in their care, and the varieties of butcher meat.

Examinations will be held at the close of each year and at the end of the course. All these examinations must be passed satisfactorily before the student can be registered as a candidate for the degree.

Graduation.—Upon completing satisfactorily the full course of study, the student receives the degree of Veterinary Surgeon (V. S.), upon the

same conditions as those on which the degree of Doctor of Medicine is conferred.

A handsome amphitheatre and large rooms for dissection and laboratory work have been erected, and the stables requisite for hospital use will be finished and occupied before the opening of the department, in September, 1884.

A National Pharmacopœia for the United States.

On January 8, 1884, Mr. Randall presented the following bill to the House of Representatives:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

That the Secretary of the Treasury shall, as soon as practicable, detail two officers of the Marine Hospital Service, and the Secretary of War shall detail two officers of the Medical Staff of the Army, and the Secretary of the Navy shall detail two officers of the Medical Staff of the Navy, for the duty of compiling and preparing a pharmacopœia, which shall be known as the *National Pharmacopœia of the United States of America*, and shall be held and accepted as the standard for the purveying, compounding, and dispensing of drugs or medicinal agents, and shall be taken as authority in the Treasury Department on all questions arising under the tariff laws of the United States with regard to the nomenclature, description, and purity of drugs or remedial agents, and shall further be received as evidence in the United States courts. And the matters contained in the said pharmacopœia shall be free for use by all authors and commentators for the benefit of the medical and pharmaceutical professions and of the community at large; and it shall not be lawful for any one to reprint and publish the said pharmacopœia as a whole.

Sec. 2. That the medical officers detailed as above provided shall invite the American Medical Association and the American Pharmaceutical Association, at their next annual meetings, to form committees of not more than three members from each of the said Associations, which committees, if so appointed, may cooperate with the above-named medical officers in the preparation of the said pharmacopœia, forming a board which shall have power from time to time to add to its number as may in its judgment be necessary, and which shall elect a chairman and secretary, and adopt such rules as it shall see fit for the expediting and perfecting of the said pharmacopœia, which, when completed, shall be printed under the supervision of the said board; and an edition of not less than five thousand copies shall be printed, for use in the several departments of the Government of the United States; and copies may be furnished to private persons in accordance with the provisions of section thirty-eight hundred and nine of the Revised Statutes.

Sec. 3. That for the purpose of defraying the necessary expenses of preparing the said pharmacopœia, the sum of five thousand dollars is hereby appropriated out of any moneys in the treasury not otherwise appropriated, and the same shall be disbursed under regulations to be prescribed by the Secretary of the Treasury.

Sec. 4. That the said pharmacopœia shall be revised once in ten years, upon the plan embodied in this Act.

Pharmaceutical Notes.

Jensen's Crystal Pepsin.

The knowledge of the value of this variety of pepsin is rapidly extending. Recently the United States Marine Hospital Service has ordered three kilos of it at once, to be put up in 2.5 gramme bottles. Dr. Jensen has devoted many years of close attention to perfecting his product, and it now stands with the very first in its line.

Nitrogenized Iron.

This ferruginous product, prepared by Chapman, Green & Co., Chicago, ranks as one of the best of chalybeates. It is palatable and efficient.

Bromidia and Papaine.

The pharmaceutical preparations of Battle & Co., of St. Louis, are in no sense secret preparations. The full formulæ are open to the profession. Their claim to favor rests on the exceptional purity of the constituents employed, uniformity in composition, agreeable flavor, and judicious proportion. We have been using for some time the two above-named, and they evidence the justice of these claims.

The Philadelphia Clinical Society.

The Northern Medical Association of Philadelphia reorganized at the College of Physicians on the evening of January 26th, as the Philadelphia Clinical Society. A large number of new members were enrolled, and the following officers elected for the ensuing year:

President—Henry Beates, Jr.

First Vice President—E. E. Montgomery.

Second Vice President—Hannah T. Croasdale.

Corresponding Secretary—J. E. Richardson.

Recording Secretary—J. G. Heilman.

Reporting Secretary—G. Betton Massey.

Treasurer—L. Brewer Hall.

Censors—A. S. Barton, S. N. Troth, Albert H. Smith, James B. Walker, and Henry Rihl.

To Prevent Horses from Slipping.

From the *Med. Press* we learn that Mr. C. C. Baird, of the Dick Veterinary College, Edinburgh, has invented an india-rubber frog-pad for fitting into the heels of the shoes of horses, with the view of preventing the animals from slipping and falling. The invention is exceedingly simple, and will be of great value to medical men and others who drive horses, especially on asphalt, and in frosty weather. The pad can be removed in the evening and replaced in the morning. A set of pads is expected to wear out two sets of shoes. The trial of the invention has fully borne out the statements of the inventor as to the merits of the apparatus.

A New Medical Society in New York State.

On February 6, a meeting of the adherents of the National Code of Ethics was held in Albany, and the New York State Medical Association was organized. The following officers were elected:

President—H. D. Didama, M. D., of Syracuse.

Secretary—E. D. Fergusson, M. D., of Troy.

Treasurer—John H. Hinton, M. D., of New York.

Dr. Austin Flint, Jr., proposed New York as the next place of meeting, which was adopted. It was resolved that the time of meeting should be the third Tuesday of November.

American Pork in France.

The French Academy of Medicine, in reply to the questions propounded by the Minister of Commerce, relative to the importation of pork, says: First, that the symptoms of typhoid trichinosis are so dissimilar from all others that they never can be mistaken, and second, that the importation of foreign salt pork may be fearlessly authorized by the French Government, as it has been clearly proved that no danger to the public health has been caused by such importation.

Sacrificed to Duty.

From a foreign exchange we learn that Dr. G. A. Popow, one of the assistant physicians of Prince Peter von Oldenburg's Children's Hospital, while engaged in examining the throat of a bad case of diphtheria, received on his lips and face some of the secretions from the child's mouth. In spite of the most careful cleansing, he was seized next day with shivering and the first symptoms of an attack of diphtheria, which within five days proved fatal.

The Sewer System of Denver.

Colorado, and Denver (as its chief city), has become so much of a health resort that it has become very essential that its sanitary arrangements should be well looked after. The difficulty about its water supply has been overcome by the boring of artesian wells, which furnish an abundant supply of most wholesome water, and we are pleased to learn from the *Denver Medical Times* that a most efficient system of sewerage has been introduced.

A Ventilated Quilt.

The *Lancet*, December 29, 1883, tells us that a Mr. Pocknell has invented some kind of a ventilated quilt, that, while it preserves the warmth of the body, yet allows of ventilation. Our authority does not seem to have a very definite idea of the nature of this invention, but believes that "it consists in a system of perforations which are filled in with some substance that allows the vapor to escape."

Items.

—Leprosy and elephantiasis are common and widespread throughout Mexico.

—Dr. J. Morrison, of the *Nautical Almanac* office, Washington, D. C., has been elected a Fellow of the Royal Astronomical Society of London, England.

—Dr. Frank H. Hamilton's work on *Fractures and Dislocations* has recently had a sixth revision and translation into French at the hands of Dr. G. Poinset.

—M. Pasteur's Cholera Commission is to be honored by the nomination of two of its members, M. Straus and M. Roux, as chevaliers of the Legion of Honor.

—The Chamber of Commerce of Cincinnati is said to have voted to memorialize Congress to take prompt retaliatory measures in regard to the prohibition of the importation of American pork into France and Germany.

—One of the members of the Louisiana State Board of Health, Dr. Formento, has been nominated a corresponding member of the *Société d'Hygiène Publique*, of Bordeaux.

—The heaviest human brain observed thus far is said to have been that of the Russian poet, Turgeneff, who lately died in Paris. It is reported to have weighed 2,012 grammes.

—Important lesson to all writers, as given by Dr. Billings, U. S. A.: 1. Have something to say. 2. Say it. 3. Stop when you have said it. 4. Give a proper title to what you have said.

—At the recent examinations for *externes* to the Paris hospital, three women physicians passed successfully. There were 254 candidates. Madam Sarrante passed sixth, and Madame Chopin one hundred and forty-second.

—Holmes calls Ricord "the Voltaire of pelvic literature—a skeptic as to the morality of the race in general, who would have submitted Diana to treatment with his specifics, and ordered a course of blue pills for the vestal virgins."

—The abolition of chaplaincies at the Paris hospitals has excited the indignation of the Archbishop of the city, who advises the faithful not to send the sick to the hospitals, but to organize a system whereby they may be treated at home.

—The Senate Committee on Commerce is reported to have acted favorably on an amendment to the shipping bill providing for the abolition of the present system of supporting the marine hospitals by a tax on sailors, and throwing the expense directly on the government.

—It is claimed that many letters went to the Dead-Letter Office because of the inability of color-blind persons to recognize the difference in color between red and green. This is obviated by the law which has just gone into effect, of having but one denomination and a uniform rate of letter-postage.

QUERIES AND REPLIES.

M. D., of Pa.—You will find the full text of the Act to regulate the practice of medicine in Pennsylvania in the *MEDICAL AND SURGICAL REPORTER*, vol. xlv., p. 502. It will answer the questions you put.

A Correspondent requests those of our readers who have given some special attention to the treatment of asthma to communicate their most satisfactory methods through the columns of this journal. We second his wishes.

Dr. S. W. D., of Va., asks the experience of physicians on the use of carbolic acid, hypodermically, in hemorrhoids. He observes that some writers commend it, while Allingham and others say it is useless. We shall be pleased to publish replies.

Dr. K., of S. C.—We take a special interest in developing our knowledge of indigenous materia medica, and will gladly publish any observations in that line.

DEATHS.

SHRADY.—In New York, January 15, 1884, Jeannie Lookhart, wife of Dr. John Shrad, and daughter of Lucinda and the late Walter Sammis.

SWARTZLANDER.—February 6, 1884, Susan M., wife of Dr. Frank Swartzlander, in the thirty-second year of her age.

THE MEDICAL AND SURGICAL REPORTER.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

PROOF THAT HUMAN MILK CONTAINS ONLY ABOUT ONE PER CENT. OF CASEIN; WITH REMARKS UPON INFANT FEEDING.

BY ARTHUR V. MEIGS, M. D.,

Physician to the Pennsylvania Hospital and Children's
Hospital, of Philadelphia.

(Continued from page 197.)

There are objections to such a belief; it has been already shown that human milk contains only one-third the amount of casein that exists in cows' milk; and there is a further important difference, which Biedert also appreciates, that human milk is always alkaline, while, on the contrary, cows' milk is acid. A coagulum, therefore, produced in a solution which is relatively so concentrated as is the case in cows' milk, and further in a fluid which is acid in reaction, is a very much denser and larger one than can be had from the relatively weak solution in human milk; and it is quite possible, therefore, that the difference may be owing to the different degrees of concentration, and the difference of the fluid media in which the casein is held; it cannot, therefore, yet be conceded that Biedert has absolutely demonstrated that the two caseins are chemically and physically different, although he has brought many strong arguments to bear. It is impossible to decide with certainty about casein in all its relations, while as yet it is not even known whether it is a simple or compound substance. Its solubility or insolubility after it has once been precipitated depends in great part upon how the original coagu-

lation was effected, and whether or not it was thoroughly dried. If casein is once thoroughly dried for a good many hours at 100° C., it becomes absolutely insoluble in water, and will not dissolve even in a strong solution of caustic soda. Lehman (Physiological Chemistry, Cavendish Society Translation, vol. i, p. 378) says: "I believe that the jelly-like coagula of women's milk are more dependent on the alkaline state of the fluid than on any peculiarity in the casein; at all events, I have found that women's milk, when acid, yields a much thicker coagulum than when alkaline, and cows' milk, when alkaline, a much looser coagulum than when acid—facts of the highest interest and value in relation to dietetics."

Whatever may finally be decided about casein—whether those of cows' and human milk are as different as Biedert believes he has proved, or whether they are nearly alike, the difference being merely that the quantities are not the same and the containing fluid media different—what most concerns the subject in hand is the relatively small quantity which exists in human milk; for it shows conclusively that in a food for infants, the amount of casein in cows' milk must by some means be reduced to equal the amount in human milk. The correct conclusion of Biedert, that not more than 1 per cent. of cow casein should be present in a food for infants, is the more surprising as he arrives at the opinion from a totally different reason from the true one, that human milk contains only 1 per cent. (See table, page 226.)

Although Biedert's conclusions are very instructive, as he arrives at them from clinical experience; and surprisingly correct in many respects, he goes astray in assuming an incorrect

	Human. (Mean composition from milk of 43 women.)	Artificial Food. Cream, 10 cc.; milk, 5 cc.; lime water, 10 cc.; water 15 cc.; su- gar, 2.2 gms. (Cream contained 12.470 per cent. of fat.)	Artificial Food: Cream, 2 table- spoonfuls; milk, 1 do.; lime-water, 2 do.; sugar-water, 3 do. (Cream con- tained 17.129 per cent. fat. Each table-spoonful was (Cream 20 cc. Sugar- water was 173/4 drachms to pint.)	Cows' Milk.	Cows' Milk.	Eagle Brand Con- densed Milk.	Con- densed, 1 teaspoon- ful (10.233 grammes) to 6 table- spoonfuls (90 cc.) of water.	Cream.	Cream.	Creams.	Amount of Fat in each.
										No. 1	19.020
										" 2	17.507
										" 3	13.362
										" 4	12.470
										" 5	17.129
										" 6	16.024
										" 7	13.825
										" 8	14.950
Water . .	87.163	88.357	87.639	88.549	87.012	27.942	92.673	79.122	79.901	" 9	18.082
Fat . . .	4.283	3.506	4.765	3.310	4.209	10.335	1.095	13.362	12.470	" 10	16.502
Casein . .	1.046	1.214	1.115	2.792	3.252	9.522	.868	2.919	2.846	" 11	12.159
Sugar . .	7.407	6.669	6.264	4.898	5.000	50.861	5.206	4.140	4.308	" 12	15.611
Ash . . .	.101	.254	.217	.451	.527	1.340	.158	.457	.475	" 13	19.071
Total .	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	" 14	11.782
Error . .		.009 per cent. loss.	.029 per cent. in excess.	.029 per cent. in excess.	.058 per cent loss.	.476 per cent loss.	.009 per cent. in excess.	.109 per cent. loss.	.039 per cent. in excess.	" 15	18.519
										" 16	21.465
										" 17	21.290
										Average from the 17 . . .	16.396

The human milk average is the result of ten analyses made. Eight separate analyses were made of the milk of different women; on another occasion, equal quantities of milk were taken from twenty-seven (27) women, and a portion of this analyzed; on a third, equal quantities of milk were taken from eight (8) colored women, and this subjected to analysis.

standard of the average composition of cream. The estimate of Hoppe, which he assumes to be correct, places the amount of casein too high; for, as may be seen by a reference to my table, cows' milk and cream do not contain more casein than sugar. The usual estimates rate the casein too high, at the expense of the sugar. This being the case, and Biedert reckoning the composition of his cream mixture from this incorrect standard, and not from any analysis either of the cream or the mixture itself, as should have been done, places his fat amount too low, as only a very poor cream is so weak in fat as his standard rates it. A mixture made as he directs is far weaker in sugar than human milk, and therefore, although, perhaps, proper for temporary use in cases of indigestion, cannot be accepted as a standard of what an infant food should be; and it entirely fails to accomplish what he says should be done—make up to the infant by an excess of carbo-hydrates the lack of albuminates which exists in the food—for it only contains about half as much sugar as exists in human milk.

All these facts show that the tendency has been constantly toward the truth, and that physicians have been learning empirically for what reasons cows' milk has failed as an infant food, and how the difficulties which its use entailed were to be overcome. The use of cream has been advised; cream and whey; diluted milk; diluted milk with milk-sugar; cream, milk, lime-water and

arrowroot-water; and finally comes Biedert's cream mixture, and he arrives more nearly at the true solution of the difficulty than any of the others, but still falls wide of the mark, from want of a precise knowledge of the composition of human milk, and of cows' milk and cream.

Investigators have thus, year by year, and step by step, been approaching the desired goal, and it needed but a touch for light to be let in upon the whole subject. Many hours and much careful and patient labor have been expended in investigations in this field, and no single worker could have done his part without having the results of the labors of his predecessors before him, to guide him a long way in the field, and give him easily the knowledge which would enable him, after much toil and trouble, to advance one little step more towards what was previously unknown. Thus, no individual investigator, no matter how important the advance in knowledge he may have made, should assume too large a share of credit; for it can be but a very small part of the great whole, and would be valueless but for the rest, into which it fits, and completes that which would otherwise be useless.

The necessary data being now at hand, it is comparatively easy to construct a food which shall, at least, be more nearly what is needed than any previous one. In making such a food, there are two matters to be considered: the proximate constituents must be in the same relative proportions

as they are found in human milk, and they must be in a medium which shall be, as human milk is, alkaline. This latter end is easily accomplished by the use of a due amount of lime-water, and is justified by the fact that it is a matter of experience, almost universally acknowledged as true, that it is a most useful adjunct, rendering cows' milk more easy of digestion by the human stomach. The quantity of lime-water to be used should be one-fourth of the total by measure. This may seem to many persons an excessive quantity; but when it is understood that if made as ordinarily directed, by agitating water with lime and then filtering, it contains only two decigrammes of lime in each litre, it becomes plain that the use of lime-water means the administration of a great deal of water and very little solid matter. The above estimate was arrived at by direct experiment; 10 cc. of freshly made, filtered lime-water, being evaporated, was found to yield two milligrammes of lime. This is a very large estimate of the amount of lime soluble in water, as may be seen by reference to the United States Dispensatory, or the National Dispensatory, both giving it as much less. That the use of lime-water (alkali) in an infant food makes a difference in its behavior with some reagents is shown by the following experiments. A food was made in the proportions which will presently be given, and 10 cc. of it agitated with ether and alcohol, as directed in my previous paper read before the Society, for the extraction of the fat; it was found that the coagulation took place in the form of a fine network, which remained permanently distributed through the lower stratum of the liquid, no sediment forming at the bottom. When an exactly similar mixture was made, except that the lime-water was replaced with water, leaving the fluid acid, and this agitated with ether and alcohol, thick, heavy curds formed, which at once sank to the bottom. Again, when two mixtures—one with and the other without lime-water—were treated with ten drops of acetic acid, the one without lime-water showed much larger, heavier coagula than that which contained lime-water. These experiments show with certainty that the addition of lime-water does alter the coagulability of the casein when experimented with, whatever may take place in the stomach; and I have already quoted Lehman's opinion that the acidity or alkalinity of milk makes a difference in the formation of the coagulum. Whatever may be the value of these artificial experiments, the great reason for the use of lime-water is that the experience of man has found it good, and that is

sufficient reason for its use in the present state of knowledge. It is quite possible that in the future something better may be found—phosphate of lime perhaps, for it is the salt which exists in milk in larger quantity than any other; but further and exhaustive study of the inorganic constituents of both human and cows' milk will be required to place this matter upon an exact scientific basis. It is very desirable that further study of the salts of milk should be prosecuted, and it is much to be hoped that in the near future exhaustive analyses will be made. The amount of inorganic matter in cows' milk is so much greater than that in human milk that, as there is at present no means of removing it without altering or destroying the other component parts, no infant food can be made exactly like human milk in respect to the amount of salts contained.

So far as bringing the other proximate constituents to like proportions with those in human milk, the first step must be to so dilute with water as to get the desired quantity of casein; the fat and sugar can be increased by the use of the necessary quantities of cream and commercial milk-sugar. Taking the averages of cream and good city milk as already given (see table), it will be found by calculation that if there be mixed together 10 cc. of cream, 5 cc. of milk, 10 cc. of lime-water, and 15 cc. of water, with 2.2 grammes of milk-sugar, the desired mixture is had. That this is the case should not be trusted to mere calculation, but an analysis of the mixture should be made, both to verify the calculation and to observe how the mixture behaves when subjected to the analytic processes, whether it in its reactions more closely resembles cows' milk, with which it is made, or human milk. The table shows the results obtained by such analyses.

The easiest way to prepare and use the food is as follows: There must be obtained from a reliable druggist packages of pure milk-sugar containing seventeen and three-quarters drachms each. The contents of one package is to be dissolved in a pint of hot water, and it is best to have a bottle which will contain just one pint, as there is then no need for further measuring. The contents of one of the sugar packages is put into the bottle, and when filled with hot water the sugar soon dissolves, and it is ready for use. The dry sugar keeps indefinitely, but after it is once dissolved it sours if kept more than a day or two in warm weather; it is understood, therefore, that the sugar-water must be kept in a cool place, and if it should at any time become sour, as is easily discovered if it is smelled and tasted, it should be

thrown out, and after the bottle has been carefully washed with boiling water, the contents of a fresh package dissolved. A milkman must be found who will serve every day fresh, good milk and cream. By good milk is meant ordinary milk, such as is easily procured in most cities, and not rich Jersey milk; and in the same way the cream should be such as is ordinarily used in tea and coffee, and not the very rich cream of fancy cattle. The reason that ordinary milk and cream are recommended, is because they are within the reach of almost every one, and not because they are any better than the rich milk of high-bred stock. If Jersey milk was to be used, it would be necessary to analyze specimens, and then make the necessary calculations as to how to dilute it to obtain the desired relative proportions of the proximate principles. When the child is to be fed, the nurse should mix together two tablespoonfuls of cream, one of milk, two of lime-water, and three of the sugar-water, and then as soon as the mixture has been warmed it may be poured into the bottle, and the food is ready for use. If the infant is healthy this quantity will not satisfy it after the first few weeks, and then double the quantity must be prepared for each feeding. Twice as many tablespoonfuls of each of the ingredients must be mixed together, making sixteen tablespoonfuls (about half a pint) in all.

This food should not be given any stronger until the child is eight or nine months old at least, but if the infant is a healthy one, it may take as much of it as it wants, but always of the same strength. A robust infant will often take three pints, or even more, in each twenty-four hours. It is an easy matter for any one to learn how to make the lime-water; and it is advisable to have it made at home, for a great deal is used, and if it is made at home much trouble and expense are saved.

With regard to the propriety of increasing, from week to week, the strength of any artificial food given to infants, there has been some question. Most authorities have advised that the foods should be increased in concentration until finally the infant is given pure cows' milk. The propriety of this procedure, during the earlier months of life at any rate, is very doubtful. Although there is some reason to believe that the quantity of solid ingredients in human milk increases from month to month as lactation goes on, such an opinion should be accepted only with great caution, for it seems likely that if there is any increase in the concentration of the milk after the colostrum has once disappeared, and the nursing

process has settled down into its even course, the increase is so slight that it may be disregarded. Analyses show that the milk of a woman whose child is two months old does not differ materially from that of one whose child is twelve or fifteen months old. If, then, nature has made no difference, which our means of analysis will detect, between the milk of a woman who has been nursing two months, and one who has nursed twelve, an artificial food which has been found to suit an infant of two months, should be made more concentrated only very gradually, and with careful observation of the effect upon the health of the infant. It is best, therefore, if the infant thrives and grows as it should, not to make any change in the food until after six to nine months of age have been attained.

With regard to the use of condensed milk as a food for young infants, I can only repeat what I said in my former paper, that I cannot believe that any article which has been canned, and kept for weeks or months, or perhaps still longer, can be so good as the same thing when fresh. My table of analyses shows the composition of the dilution of condensed milk commonly used in this city, and it shows that the proportion of fat is much too small, and for this reason, partly at least, it fails as a food. Its success is due to the fact that it contains nearly the same proportions of casein and sugar as exist in human milk. Dr. Ellwood Wilson is in the habit of directing that after the first few weeks a small proportion of fresh cream be added to the condensed milk, and this would render it still more nearly what is needed; this practice, which cannot be too much commended, if condensed milk is used, is not, however, at all a common one. Withal, I am unable to believe that condensed can be as good as fresh milk, if properly used. There are many other points of great interest, connected with this subject, which I should have liked to bring to your attention, but my paper has been already much too long.

CHRONIC NASAL CATARRH IN CHILDREN.*

BY HARRISON ALLEN, M. D.,

Professor of Physiology in the University of Pennsylvania.

In many instances the clinical history of a case of chronic nasal catarrh in the adult embraces groups of symptoms which belong to the period of childhood. Comparisons of numbers of such histories force the observer to the conclusion that the

* Read before the College of Physicians of Philadelphia.

juvenile phase of the disease includes various conditions of the nasal chambers and of the pharynx. A lady, aged thirty, reporting for the treatment of a catarrh which had persisted from the seventh year, recalled the distress at that time experienced from frequent passage of mucus from the naso-pharynx to the oro-pharynx. A young man, aged twenty, who suffered from obstruction of the nasal chambers, and whose tonsils were normal at the time of examination, remembered the fact that these bodies were of large size when he was quite young. A third patient, aged thirty-five, suffering from copious muco-purulent discharge from the nose, complicated with pharyngitis, was confident that the habit of hacking had annoyed him as early as his ninth year to as great a degree as at the date of reporting for relief. While it must be conceded that in recording the clinical history of an adult, allowance must be made for lapses of memory and for the probable co-existence of exanthematous and of diphtheritic sore-throats, it is certain that some of the little patients who come under care exhibit symptoms which are apt to persist in some modified form in adult life.

In the light of such evidence it becomes a matter of interest to ascertain what peculiarities, if any, are to be found, which characterize chronic nasal catarrh in children.

Accepting as an axiom that this disease cannot be appropriately studied without a correct understanding of the structures of the nasal chambers, it must follow that the differences between the adult and other juvenile phases of the disease may be expressed in some degree by the differences between the peculiarities of the chambers themselves at the two periods.

In the child the vestibule is small, the floor is raised, the inferior meatus is shallow, the mucous membrane is of a delicate red color, and the eminences corresponding to the anterior ends of the inferior turbinated bones are rounded, and relatively of greater length than in the adult.

In part owing to the difficulties, and in part to inherent distinctions, the juvenile aspect of the disease is marked by a number of negative features. Thus, the membranes are never infiltrated with the products of inflammation, or corrugated, or ulcerated. The lower border of the inferior turbinated bone is never concealed within a deep inferior meatus. The septum is never, or almost never, deflected, unless a history of injury explains such deflection. Disease is never located above the respiratory tract. Atrophic catarrh is unknown.

Symptomatology and Diagnosis.—Congestion and acute inflammation of the nasal mucous membrane is common in childhood. The discharge in the beginning of the attack is almost always mucoid. The serous stage so commonly present after profound impression in adults, is not recognizable, and the transition is usually abrupt from a discharge of mucus to one of muco-pus. If air passes freely through the chambers the discharge is apt to dry and to form "crusts" or "scabs." These collect for the most part in the vestibule, though they may form at any portion of the respiratory tract. The discharge will often remain muco-purulent throughout the entire treatment, so that instead of expecting a return of the mucoid stage the practitioner should look forward to a gradual cessation of the amount of the discharge. The muco-pus in favorable cases becomes thicker as the case improves, and toward the close is often of the consistence of curd.

The child either "sniffles" in order to draw into the nose the discharge which, from the shallowness of the vestibule, inclines to flow outward from the nostrils, or it exhales or "hawks" if it inclines to fall into the pharynx. By careful observation of these acts, it can be ascertained that the place at which the discharge is most annoying (all things remaining the same), is also the place at which the greatest amount of obstruction exists.

Should the tonsils be very large and establish mouth-breathing, care should be taken not to confound the tumid state of the membranes of the nasal chamber with the evidences of local disease. Although the two conditions of nasal catarrh and enlargement of the tonsils often exist together, they need not.

When tumid tonsils are present, the probabilities are in favor of the adenoid growths at the roof of the pharynx being in the same condition. The naso-pharynx in such patients is occupied with tenacious mucoid discharge. The nasal chambers and the naso-pharynx, considered as parts of a single chamber, are shut off from communication with the oro-pharynx and the normal downward flow of mucus prevented. The mucus can be at times brought away through the nose by the handkerchief, and the impression may be erroneously received that the discharge, instead of being pharyngeal and mechanically retained, is catarrhal, and that it originates in the nose.

It need be scarcely necessary to say that the presence of mucus in a naso-pharynx which is thus narrowed, renders the danger to aural complication decided; and, while the condition is one not ad-

mitting of classification with cases of true nasal catarrh, the diseases of the nose and ear are inextricably associated.

The general health is rarely good, and symptoms which relate to mal-nutrition are so pronounced that they have received careful attention at the hands of the writers on the diseases of children. This subject is elaborated in the succeeding paragraphs.

Etiology.—Chronic catarrhal states in childhood are invariably associated with other effects of mal-nutrition. While this is not a novel statement, it is at least one which has been imperfectly formulated. Such effects should not be dismissed as being simply those of scrofula and of rickets, but should be exactly referred, as far as it is possible so to do, to the laws of development. Many conditions are present in patients who suffer from catarrh, which may be called errors in development. It is true, these errors are not of the kind denominated "variation," or "anomaly," but are pathological, and may be regarded as the results of precocity or retardation occurring in rapidly-growing tissue. They are conspicuous in bone-tissues, tooth-tissues, skin-tissues, lymphatic tissues, and in nerve-tissues.

From the earliest period in development to its completion at the twenty-first year, disease will modify structural processes much more readily and profoundly than at any subsequent period. The tissues may be said to be more plastic during the formative period, and to retain the impress of morbid action a longer time, than in the adult, and to carry into the future the results of this impress in altered relation or proportion of the formed elements. It is not intended in this place to show that chronic nasal catarrh is in any respect peculiar in this regard, but to invite attention to the operation of such forces which appear to have escaped detection.

The period of childhood is marked by changes as great in the proportions of the parts of the head and face as in any other of the body. The growth of the brain and the development of the permanent teeth are among the more striking of these. Clinical writers lay great stress upon the influence exerted on the economy, by the errors of the cerebral and dental growths. Are the influences they exert in the etiology or in the maintenance of nasal catarrh to be ignored?

The condition of the development of the brain in connection with those of the nasal chambers, while one of great interest, presents difficulties for the investigator, since the examination of large numbers of examples would be required before

conclusions worthy of credence could be reached. Ophthalmologists have indeed noted that accelerated rates of development of the brain exist with a disposition to myopia. If such be the case, it is rational to conclude that the shapes of the nasal chambers will be in correlation with the states of the olfactory nerves, and thus the influence which exists between the brain and the eye, will be found also to exist between the brain and the nose. The extent to which chronic nasal catarrh may be found among myopes cannot be formulated.

There is no doubt that the patients are as a rule in an unnatural mental condition. The mind is either precocious or dull; the temper is irritable, and the disposition intractable; digestion is delicate, and reflex disturbances arising therefrom are of frequent occurrence. The patients belong to the class of subjects that develop morbid appetites, and, in girls, yield the predisposing causes which create so much disturbance at the approach of puberty. Chorea is occasionally noticed as a complication. In one example, a child of precocious intelligence, of delicate constitution, and who had nearly perished during an attack of acute pleurisy, the habit of exhaling air from the nostril was acquired after all symptoms of catarrh had ceased.

From the fact that with chronic nasal catarrh, errors of development of the teeth and rates of growth and nutrition of the nails are often associated, it is convenient to examine the relations between the nails, the teeth, and other structures. By way of introduction to this topic, it can be said that in pathology the connections between the hair, the nails, and the teeth are numerous.* Abnor-

*From the fact that the writer's biological and clinical studies have been pursued conjointly, he trusts that it may be thought admissible to introduce at this place some reflections concerning the nails and the teeth. These structures are of co-relative value in mammals generally. Blunt, flat teeth are always associated with hooved digits, and sharp, conical teeth with clawed digits. Adopting the methods of the evolutionists, it may be assumed that the same forces which have been operative in changing the forms of teeth are also operative in changing the forms of the hoofs and claws. This co-relation is not found in the earliest of the mammalia. In the process of evolution of the quadrupeds as they exist about us from the few generalized types known to have flourished in the past, it can be inferred that the impress upon the nutritive processes which would effect the forms of the teeth would also impress the entire tegumental series of the organism; not only the teeth and nails would be in common affected by common causes, but the hair as well. Confining these remarks, however, to the nails and teeth, it is probable that the changes of food-supply, necessitating corresponding changes in habit, would most probably effect the claws and hoofs sooner than the teeth, since the

mal development of the teeth occurs in congenital hypertrichosis. Hair and teeth are commonly found in dermoid cysts. In man and in ruminants, hairy warts are found upon the cornea. In congenital syphilis, the cornea, the teeth, and the nails are all liable to peculiar inflammatory invasions. Is it not more than a surmise that since all these structures—the hair, nails, enamel-organs, and cornea—arise from the *epiblast*, and are strictly tegumental in nature, that they may be found affected together? Be this as it may, the nails and teeth are certainly to be considered together in studying chronic nasal catarrh in children, the nails at all times, and the teeth during the formative period of the enamel-organs.*

I have recently examined 96 children, with the object in view of determining to what degree a connection could be traced between the teeth and the nails in individuals, many of whom, if not all, were known to have been subjected to neglect and to the various inherited effects which could reasonably be accepted as tending to retard development.

Of the entire 96, 15 children had white spots on the finger-nails in abundance; 5 of these had decided defective dental development—that is to say, excessively chalky enamel—distorted and disfigured crowns, etc.; 3 had moderately chalky crowns, but no distortion; 7 had no appreciable defect.

No defective teeth were found in the remaining 81 children, so that the existence of dental defect exactly correlated with the spotted finger-nails. Of the 15 children thus selected, a little less than half the entire number had spotted nails but no dental defect. No attempt was made to ascertain any defect of rate of eruption, for the data obtained from the inmates of an asylum for destitute children would be unreliable. It is quite likely that the numbers of defects of teeth would be increased rather than diminished by more careful examinations made by dentists or other persons accustomed to detect minute abnormalities. Concerning the defective teeth and nails, it is conceded that they may have arisen from acute ill-

ness, as in the exanthemata, or from gingival inflammation, as in congenital syphilis. The "measles-tooth" was found but in a single individual, whose case was not enumerated. For the rest, it is quite possible some of the appearances may have been due to syphilis, though the pegged tooth was found in a single instance only. No account was taken of the occurrence of catarrh in the inmates, for although it is probable the condition existed, it was not reported as present by the attendants. The disease is rarely recognized among the children of the poor, where the symptoms are not likely to receive attention.

From a careful study of nine patients from the writer's practice, it was found that five exhibited white spots on the nails of the hand, and defects in the form and irregularity of rates of eruption of the teeth. In a young lady, aged fifteen, who came under care for this phase of catarrh, the superior lateral incisors had never been erupted, while the left deciduous superior canine tooth had remained in the arch. In a second case of a girl fifteen years of age, who had been much neglected, the depression remaining upon the vertex (answering to the anterior fontanelle), was conspicuous, the teeth were irregular, the vault of the hard palate high and narrow, the disposition shrinking and irritable, and the mental faculties dull. In such patients, the epiphyses of the bones will be seen to be too large for the shafts, particularly in the case of the radius as it enters into the composition of the wrist-joint. At the same time, the finger-nails are often marked by large white spots, and the teeth, with milky opacities of the enamel.

The bones being slow in growth, the function of manufacture of blood-corpuscles is largely withheld from the medulla, and retained for a longer period than is natural in the blood-vessel-glands, notably the thyroid body, the tonsils, and the lymphatic glands. Hence a disposition exists for these structures to undergo hypertrophy. If this method of reasoning be accepted, it is evident that the presence of enlarged tonsils need not be regarded as a primary cause of the condition above outlined, though doubtless they may aid in a secondary manner in maintaining morbid determination of blood about the head; and if they are sufficiently bulky to cause obstruction in respiration while the mouth is closed, will in themselves create a class of disturbances peculiarly their own. All that is to be emphasized in this connection is the fact that the causes of tonsil enlargement are due to nutritive conditions.

(To be continued.)

latter are more resisting, and at least in many genera are completely formed while the claws and hoofs are of continuous growth, and would be more readily influenced by changes in the surroundings.

*Among the applications of the rate of the growth of nails in connection with diseased states, reference may be made to papers by Dr. S. Weir Mitchell in paralysis, Dr. J. M. DaCosta in typhoid fever, C. E. Hasse in cyanosis, and Poland and Langenbeck in aneurism.

RIGIDITY OF THE CERVIX UTERI AND THE USE OF ERGOT.

BY S. W. DICKINSON, M. D.,
Of Marion, Va.

I have been hoping some one would follow up the article of Dr. Boardman Reed in *REPORTER* (January 6, 1883, p. 6), on "Methods of Overcoming Rigidity of the Os Uteri—How not to Use Ergot," with additional suggestions. Such cases (*REPORTER*, December 16, 1882, p. 697) as called out his paper, and the rather caustic review of our friend, Dr. Hiram Corson, in *Pittsburg Medical Journal* for August, 1883, but too frequently come to our ears, and besides rigidity of the cervix is "one of the chief causes of delay in the first stage of labor," and causes a great amount of preventable suffering, not to speak of lacerations of cervix and consequent troubles.

Ergot cannot overcome rigidity of cervix caused by premature discharge of liquor amnii, or as seen in either nervous or plethoric women. Headland (*Action of Medicines*, p. 261) tells us that ergot "is a stimulant to the muscular nerves of the uterus," and we know that by it is produced contraction of the uterine muscular fibres. Ergot then produces just the opposite effect from relaxation, and it is as sensible to try to lift one's self over a fence by his boot-straps as to give ergot to overcome a rigid cervix. So then, as both Headland and Playfair teach, we would not give ergot unless the os was dilated or dilatable, and there was no obstruction to a speedy delivery; for if "not followed by a rapid delivery a condition is produced which is serious to the mother," and "extremely perilous to the child" (Playfair). Chloroform the great relaxant of muscular contraction, "tends in a marked degree to diminish uterine action," and according to Playfair (p. 289), is "practically speaking, generally not admissible until the head is in the pelvic cavity." Dr. Reed prefers morphia and atropia hypodermically, but mentions chloral. Opiates by the mouth or enema were given by Cazeaux, when bleeding, hot baths, etc., failed, and remembering the power opium has to relieve spasm of the intestines in colic, etc., I would not hesitate to use it when other agents were rejected by the stomach.

Probably in this State (Virginia) the fluid extract, or tincture of gelsemium, first recommended by Dr. Payne, of Lynchburg, is as largely used as any other agent, and this, with chloral, is a capital combination in many cases. But in cases of a highly nervous and emotional tempera-

ment, rendering the patient acutely sensitive to her suffering, I am prepared to say with Playfair (p. 289), "I know of nothing which answers so well" as chloral, "and I believe its administration to be far more effective under such circumstances than any of the remedies usually employed." The following case will illustrate this: Some eight years ago I saw a lady in consultation, and found her tossing about in bed, pulse over 100, and apparently becoming exhausted. The physician in attendance, disheartened by long waiting, thought the forceps the only chance. I found the head had not escaped from the os, owing to a rigid cervix, and gave twenty grains of chloral, and repeated it in less than half an hour. Our patient became quiet; slept between pains, pulse came down, and she was delivered in a few hours with no other aid than helping rotation a little with my fingers.

Patience and a cheerful demeanor, though mentioned last, are by no means the least important factors in the management of these cases, and he who can command these virtues will succeed in cases where a nervous and fearful man will fail. In conclusion, while I would disclaim originality for the above views, still I hope they will interest some one, and be of service to those who cannot yet call on a past experience to help them in times of trouble.

REPORT OF A CASE OF TRISMUS NASCENTIUM.

BY N. B. KENNEDY, M. D.,
Of Hillsboro, Texas.

About two months ago, Mr. Ward, section boss of the section below Abbot Station, on the M. P. R. R., sent me a telegram to come at once to see his infant child.

On arrival, found a plump, hearty baby seven days old.

The mother gave me the following history: When the child was two days old, she (the child) had a very hard convulsion, and the convulsions had been coming on every hour since without intermission. Several physicians had been called, but were unable to diagnose the case.

An examination being made, I found the following conditions: The umbilicus was very much inflamed, and attached to one edge of it was a fungous growth some two inches in length and as large as the large end of a goose-quill, and somewhat resembling the vermiform appendix of the cæcum.

I recognized a case of trismus nascentium by the following symptoms: Rigidity and stiffness of the muscles of the lower jaw, neck, and abdomen—*risus sardonius*—spasm, ushered in by *opisthotonos*—protrusion of the tongue—rapid pulse and cold sweat. The fungous growth was inflamed, and pressure upon it was sufficient to excite the spasms. Deciding, therefore, that the fungous growth was creating all the disturbance I resolved to remove it. I caught it in my forceps, and with a sharp pair of scissors cut it off smooth with the surface of the umbilicus, restraining all hemorrhage by the free use of carbolic acid applied to the bleeding surface. I placed the infant on the following treatment:

R. Potassii iodidi,	
Potassii bromidi,	āā ʒj.
Potassii carbonatis,	ʒij.
Ammonii bromidi,	ʒss.
Infus. columbæ,	ʒvi.

M. Signa.—Five drops every three hours in mother's milk.

R. Iodoformi,	ʒj.
Acidi carbolici,	gr. x.
Ung. petrolei,	ʒj.

M. Make an ointment. Sig.—spread on a soft cloth and keep constantly applied.

I ordered a tepid bath every morning for the babe; and instructed the mother to draw the milk from the breast, and give it, as the babe was unable to nurse.

Two days afterwards I received a second telegram summoning me the second time.

On arrival, the mother informed me the babe was still having convulsions, but that they were much lighter in character and at longer intervals. I found the stiffness of the muscles of the lower jaw, neck, and abdomen had greatly improved. So much so the babe could now take the breast, and nursed heartily. I ordered the dose of the medicine increased, and the baby had only three or four convulsions more. The convalescence was rapid and marked. There was no fever throughout the attack; and the baby continued to grow, and at this writing is the pride and delight of her parents.

In conclusion, permit me to say, I have never read of a similar case in any of the text-books, and during an active practice of twenty-five years have never met with such a case before.

If any of your numerous and intelligent readers have ever had such a case, I would be glad to hear from them.

And I would like further to know if I did right in removing the fungous growth in the manner I did.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE PHILADELPHIA HOSPITAL.

BY CHARLES K. MILLS, M. D.,

Professor of Diseases of the Mind and Nervous System in the Philadelphia Polyclinic; Neurologist to the Hospital.

Reported by WILLIAM H. MORRISON, M. D.

Organic Hemianæsthesia; Methods of Studying Sensory Disturbance; Differential Diagnosis of Organic from Hysterical Hemianæsthesia.

GENTLEMEN: I propose this morning to lecture to you on true-organic hemianæsthesia, and the differential diagnosis between this affection and hysterical hemianæsthesia. The different methods of studying sensibility clinically will be described and discussed.

This patient, Annie H., age 40 years, single, white, has been in the nervous wards of this hospital since 1877. She came to this country from Ireland in 1860. As far as she knows, her family was healthy. She herself never had rheumatism. When I first saw her, she was suffering from an apoplectic seizure, in which she remained profoundly unconscious for several days, and did not regain her intelligence entirely for two or three weeks. On coming out of this condition, found that she was paralyzed on one side of the body, and not only was motor paralysis present, but there was also complete loss of sensation on the same side.

This attack appears to have been the third one that she had. During the continuance of the unconsciousness, there were marked variations of the pulse, respiration, and temperature. Touching the dorsum or sole of the foot produced reflex movements, which were more marked on the left than on the right side. For some time after the apoplectic attack, she suffered from headache, which was most marked over the anterior half of the left side of the head. This pain was increased by percussing any part of the cranium. She also had pains in the paralyzed shoulder. During the past few years her mental and physical condition has remained about the same, with the exception perhaps that the muscles and nerves have undergone further degeneration.

Let us now study her present condition. As you see, she appears to be pretty well preserved for a woman who has been sick so long. The face exhibits but little deformity. If any thing, there is a little smoothing of the lines of the face on the left side; but she can close her eyes firmly, corrugate the forehead equally, and draw up the corners of the mouth to the same extent on the two sides. She can slightly move the left arm, but cannot lift it. The arm is not much wasted. Contracture is seen at the elbow, wrist, and fingers, which is most marked at the wrist. It is, however, readily overcome with a little force. She is able to lift the left leg with about the same facility as she lifts the left arm. The right limb is also crippled, but from an entirely different reason. On this side there is ankylosis of the knee, with disease of the bone. There is contracture at the ankle of the left side, the foot being

thrown into a condition of *pes equinus varus*. When this condition affects both sides, it has a certain diagnostic value, to which I shall allude farther on.

The examination of sensibility or sensitivity is the next point to which I will call attention. The object of this lecture is not simply to make a diagnosis of this case, but also to teach you some of the practical methods of studying the sensibility. You are familiar with the mode of examining for loss of motion, by the power to make various voluntary movements, by electricity, and by other methods. But the clinical study of sensation is too much neglected by practitioners. Although so much attention has been paid to the localization of brain lesions, yet comparatively few of the cases of disturbance of sensation due to cerebral lesion have been placed on record. This is particularly true with reference to disorder of special sensation. The reason of this is that disturbance of sensation is readily overlooked by a careless investigator, or that he does not understand the best method of examination.

An interesting study among yourselves would be as to the normal differences of sensitivity. A work entitled "Inquiries into Human Faculty," has been recently published by Francis Galton, in which some of the results of experiments in regards to sensitivity of individuals in ordinary health are given. He has shown that the powers of discrimination are much finer in some than in others, and that the power to detect small variations is greatest in the intellectually ablest. He has also determined, contrary to what we should have expected, that sensitivity is higher in men than in women, basing his opinion on the fact that as a rule men are employed as tuners of piano-fortes, tasters of wine, and sorters of wool, and in other occupations requiring delicacy of touch, taste, or of other senses. This same author has also made some curious observations in regard to such senses as sight and hearing.

In disease, involving disorder of sensation, you should study sensation as regards pain, touch, temperature and weight. You should investigate then the special senses. The sight should be studied in reference to the near and far points, the ability to discriminate colors, the fine points in pictures, and so on. In reference to the ear, not only should it be determined whether or not the patient hears, or hears better with one ear than the other, but also as to his power of determining low and high notes.

The ability to detect painful impressions can be determined in various ways. I have here an aesthesiometer with two sets of points, one pair being blunt and the other sharp, and so arranged that either or both pairs may be used. First applying the blunt points to the right side of the face, she feels them distinctly; but on the left side, although I press forcibly, she feels nothing. As I pass across the forehead she detects nothing until I get to the right of the median line, and then she feels the points. The same is true of the chest. There is complete analgesia and anæsthesia to the left of the median line. The left leg is in the same condition. I now try the sharp points and obtain the same results. I could make a pin-cushion of the left side of her face without her feeling it. The moment I cross the median line,

and not before, does she feel the presence of the needles. So much for the determination of cutaneous sensibility both for pain and touch.

Her power to discriminate between different temperatures is also lost. I have seen two cases, and they are the only ones which I can now recall, in which the sense of temperature was lost, while the sense of touch still remained. In testing this point, I shall use two sponges, one dipped in ice water, and the other into very hot water. On the right side she readily tells which sponge is placed on the arm, but on the left side she feels neither the hot nor the cold.

The experiments should be continued still further. You should examine the parts below the skin and test for muscular sensitivity and the sense of weight to pressure. An instrument has been invented for this purpose, called a piesmeter. This instrument consists of a cylinder about three-fourths of an inch in diameter and three inches long, in which is a piston which is kept pressed back to its fullest extent by a spring. At the end of the piston-rod is a flat disc, which is placed against the skin. The operator then presses against the end of the cylinder, thus forcing the piston into the barrel, and the amount of force exerted is readily read off on a scale on the instrument. On the right side she feels even the weight of the instrument, but on the left side, the strongest pressure elicits no response. Galton, in his experiments on this point, employed a series of test weights, consisting of a number of common gun-cartridge cases filled with alternate layers of shot, wool and wadding, and closed in the usual way. The appearance of these is identical, and their weights form a geometric series. The testing is performed by handing to the person operated upon, pairs of weights until his power of discrimination is approximately made out, and then proceeding more carefully. In a case as marked as this, the coarsest methods will suffice. I have here a series of ordinary weights from a few ounces to four pounds, and you see that the heaviest weight is not felt when placed upon the left arm.

The special senses next call for investigation. The eyes have been carefully examined with the ophthalmoscope and by other methods, and although the power of the left eye is less than the right, and the ability to perceive quickly is diminished, yet there are no changes in the retina or optic nerve.

The acuteness of the hearing can be determined roughly by the watch. But if it is desired to determine the ability to hear notes of different pitch, a whistle something like that used by Galton should be employed. He made a whistle which consisted of a piece of brass tubing, whose internal diameter was less than one-tenth of an inch. Into the lower end of this tube a plug was fitted which could be drawn out or pushed in at will, thereby enabling the operator to vary the length of the tube as desired. When the plug is drawn out the note is low; when pushed in, the note is high. On testing persons of different ages, he found that as age advanced, the ability to hear high notes diminished. He also experimented on animals in the Zoölogical Garden, and found that animals of the cat species had the greatest power in hearing high notes. Small dogs can hear much higher notes than can large dogs.

I have carefully examined the sense of taste, and have not found any marked impairment of either side.

One of the most difficult things to test is the sense of smell. Pungent substances, such as ammonia, should not be used. What is needed is something that has a dead smell without any pungency. Bi-sulphide of carbon would probably answer well, if there were not certain objections to its use. We shall try her to-day with rose-water. When the bottle is held to the left nostril she smells nothing, but on the right side she recognizes it immediately.

(To be Continued.)

NEW YORK HOSPITAL. -

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Scabies.

The history of the next case is as follows: The patient, J. S., is 17 years of age, single, born in Prussia, and is a sailor by trade. He always enjoyed good health until two and a half years ago, when by overstraining himself he induced a left inguinal hernia. He did not have any eruptive diseases in childhood, and he has never had syphilis or gonorrhoea. He has not been in the habit of drinking to excess. Two weeks ago he noticed an itching between the fingers of his left hand, and this was followed by an eruption of a papular and vesicular character, which quickly spread to the other hand, and to the wrists, and to the arms, and the inner side of the elbows, and then to the chest, genitals, and thighs. The vesicles discharged a thick fluid, which dried upon them and formed crusts and thick scabs. This was most marked on the inner surfaces of the fingers, and at their junction with the hand. He says he does not know how he became infected.

You will observe, gentlemen, that although this eruption is pretty general in its distribution, yet it is mostly confined to those parts of the body which are within easy reach of the patient's hands, where, you remember, it started. So you find very little eruption below the knees, but there are some vesicles on the thighs, and they are very distinct upon the foreskin of the penis, and well marked upon the arms, and especially so upon the hands and wrists. But you will notice that there are none upon the face and neck. If you will examine him more carefully, you will observe that there is no distinct, peculiar, or individual character to the lesion; but there are some erythematous spots, and some vesicles, pustules, blebs, and superficial ulcers, and some small papules, the summits of which have been torn off by the finger nails in scratching, and they are therefore now surmounted by a little drop of dried blood. This man is a museum, so to speak, of all the various forms of cutaneous lesions. He has in fact a polymorphous lesion.

The disease from which he is suffering is scabies. And this polymorphism in the eruption is very characteristic of scabies, after it has existed for some time. This man dates the beginning of his trouble back to only a fortnight since, and so the disease has made very rapid progress. You will

not very often meet with this disease in private practice, but you will see it every now and then, and you will find it a most satisfactory disease to treat, after you have succeeded in forming a correct diagnosis. It depends upon the presence of a parasitic animal, and generally in man, of that particular variety called the *acarus scabiei*. It is contagious, as are all parasitic diseases. But the degree of this contagiousness depends to a certain extent upon peculiarities in the individual exposed. All persons are not equally sensitive to the attacks of this parasite. And this fact is also true as regards the susceptibility of different individuals to those minute organisms called bacteria, which are supposed, by entering into the blood, to cause that class of contagious diseases of which diphtheria is an example.

In either case something besides the contagious element is necessary, and that is a proper host. These integumentary parasites are careful to select their host, and they will often decline to live upon certain bodies, because they do not find them congenial. And I suppose, gentlemen, that a certain number of you might hold this man's hand for a time, and not take the itch from him. But it is probable that a large proportion of you would. There are many curious features in the natural history of this disease which it would be interesting to talk about; but as our time is limited, and as they are not essential to an understanding of the disease, I will not stop to discuss them now.

But this much it is important that you should know, namely, that this *acarus* is an insect which can readily be seen by the naked eye, and that while it thrives upon the integument generally, yet it chooses for its invasions certain special parts of the body in preference to others. Thus the tender integument upon the inside of the fingers, and the wrists, the axillae, the genital organs, the toes, and the parts around the ankles, are the principal seats of election. And in certain trades-people, and artisans, they sometimes select other parts by preference, to which they are attracted by reason of the unusual warmth or pressure to which these parts are exposed. Thus in tailors and shoemakers, and those who ride much in the saddle, and in those who retain the sitting posture constantly while at their business, it selects the skin of the buttocks just over the tuberosities of the ischia.* The disease most frequently begins in the hands, and it is transferred by them to the other parts of the body which are handled the most.

The insect bores its way into the epidermis, and does not live upon the surface of the skin. It is, therefore, really not an epizoon, though it is classed among them. The female makes her nest between the horny and the mucous layers of the skin, and there she lays her eggs, and in a week or ten days they become matured and the young are discharged from the ova. The male also burrows, but not so deeply, but it migrates farther.

Symptoms.—The first subjective symptom of this disease is usually an itching between the fingers, which is sometimes extremely severe. And in nervous individuals, after the disease has spread to other parts, there is a general hyperæsthesia of the skin, and they scratch themselves everywhere they can reach. So only a small portion of this polymorphous eruption which you see is produced

by the insect, but it is largely due to the violent scratching and tearing of the skin by the patient's finger-nails. Thus a general eczema may be produced as a consequence of this constant irritation.

The next objective symptom is the appearance of an eruption, which is somewhat peculiar in its early stages. Little vesicles first appear between the fingers, and upon close examination a canaliculus may be seen running from each of these. Each of these canaliculi is made by the burrowing of an insect just beneath the epidermis; and each is a quarter of an inch or more in length, and terminates in a vesicle in which the insect has made its nest and laid its eggs.

This little canal has been said to be the essential diagnostic element of this disease, and if you do not find this, the suspected vesicle is not due to scabies. But I think this is too strong a statement, for you will now and then find vesicles which contain no animal, and hence there is no canal leading to them. There is no difficulty, as a rule, in finding the acarus. Simply take a common sewing needle and insert it into the canaliculus and carry it along until it reaches into the vesicle, then rupture the vesicle and bring the needle out, and upon its point you will usually find the animal. But you must remember that while this is the characteristic vesicle of scabies, yet its peculiarity is often destroyed by scratching, and this is especially true as regards children. The crucial test in all cases, however, is the discovery of the insect.

The prognosis is always good in these cases, if they are properly treated.

The rational treatment, which consists in removing the cause of the trouble, is perfectly applicable here. This may be done in many ways, for there are many means of destroying the insect. Sulphur, however, is the classical remedy for this disease; and it was used in the earliest times, and is probably to this day the most universally employed for this purpose. Its action on the skin may be obtained in various ways, either by means of sulphur baths, by fumigations, or by ointments. Perhaps I can do no better than to describe to you the way the treatment is carried out on a large scale in the hospitals of Paris, and particularly in the hospital of Saint Louis, where a special department is devoted to the treatment of skin diseases. Here they have a large apartment, into which every morning the patient is sent naked. The first thing each one does is to thoroughly soap himself with soft soap, and then each soaps his neighbor over those parts which he cannot himself reach. This is done in order to soften the epidermis. The patient then goes into another apartment where there is a hot bath, into which he gets, and lies there from twenty minutes to half an hour. He then dries himself and goes into another room, in the middle of which stands a large tub filled with an ointment which consists of carbonate of potash one part, to flowers of sulphur three parts, and lard eight parts. Each patient now rubs this ointment freely into all the crevices of the skin, and then dresses himself again in his own clothing. This can be safely done, for the process is so thorough that the ointment which is left on the skin effectually destroys all the insects which may be present in the clothing. After repeating this process

from three to five times, the most obstinate cases of scabies are cured. There is no better plan of treatment than this to follow, even in private practice, for it can be carried out at the patient's home almost as conveniently as in a hospital. This process of softening the epidermis before applying the ointment is very important, in order to thoroughly destroy the vesicles, and the eggs, and the immature animals, which are concealed in them. Another important point to remember is to apply the ointment to the whole surface of the body, and not simply to the parts which seem to be affected. For this is a migratory animal, and without this precaution you may fail to destroy some which have wandered to distant parts. The head and neck are the only parts of the body which can be spared, for it is extremely rare to find that they have invaded these regions.

Carbolic acid, creasote, iodide of potassium, and the salts of mercury, have also been successfully used in this disease, for they are all destructive to the lower forms of both animal and vegetable life.

A peculiar fact in the history of scabies is that the same theories have been held with regard to the significance of the acarus, as have more recently been held by investigators with regard to those low organisms which are now supposed to enter into the circulation, and to produce the various forms of infectious fevers. That is, it has been maintained by some that the acarus is not the cause, but only one of the products of the disease. It is, they said, an example of spontaneous generation, for the fluids of the body are in just that condition which is favorable to the development of these animals within the vesicles. And so they are only an incident, and have no share in the production of the disease. On the other hand, the idea prevailed with many in the sixteenth and seventeenth centuries, that the psora was the basis not only of the itch, but of all diseases. It was for instance supposed that this animal got into the bladder, and so caused diseases of the kidneys, or by getting into the joints it caused gout; and so it was considered to be the universal cause of all maladies. The same notion prevailed for a long time in regard to those spores which cause prurigo favosa, and herpes circinatus. And the view taken by Mr. Erichsen until recently in regard to prurigo favosa, is that it is a disease of inflammatory origin in which spores are found as a complication, and not as a true cause of the disease. In like manner, many now maintain that the bacteria which are found are not the cause, but only an incident in the development of surgical fevers, diphtheria, and the like.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Discussion on Composition of Milk and Infant Feeding. (See Pp. 193 and 225.)

The President called attention to the following points for discussion:

1. Any method of analysis which is to be generally accepted must be susceptible of verification.
2. All previous analysts agree about the

amounts of water, fat, and ash; therefore, about the amounts of casein and sugar alone is there any disagreement.

3. Further, all agree about the sum of the amounts of these two elements (casein and sugar), but diverge widely about their individual amounts.

4. If it has been proved that, collectively, casein and sugar amount to about eight per cent., and that the sugar is about seven per cent., it then follows that the casein is only one per cent.

5. When subjected to the same method of analysis, human milk yields nearly seven per cent. of crystalline sugar, and cows' milk about four per cent.

6. To be able to make a proper food for infants, we must first understand the composition of their natural food—human milk.

7. Is there any great and important difference between the casein of human milk and that of cows' milk, except that it is contained in the latter in a larger proportion?

8. In preparing cows' milk for infants, clinicians usually direct that it be diluted, and some sugar and lime-water added; but more precision of advice is needed.

9. What is the best method of making an artificial food like human milk?

10. What is the propriety of increasing the nutritive quality of the food from month to month, as the child grows older?

11. What can be said of condensed milk as a diet for infants?

Dr. J. Cheston Morris, in opening the discussion at the request of the chair, said: It gives me great pleasure to pay my tribute of respect to the accuracy and industry which Dr. Meigs has so evidently exhibited in his investigations, though they have led him to very different results from my own. Accurate analysis, even of inorganic bodies, is difficult, as many of us know who have tried it; but accurate analysis of inorganic mixtures is far more so, from the changes continually going on in them.

A perfect method of milk analysis is probably not yet attained. Dr. Meigs having replied to a question from Dr. Morris that he obtained the amount of fat present by repeated washings of the milk with ether and alcohol, Dr. Morris resumed: The extraction of all the fat present is difficult, owing to the globules being surrounded by a thin membrane of casein; this has been proved by Mitscherlich, who advises the previous agitation of the milk with a small quantity of solution of caustic potash, when the ether immediately dissolves out the fat. Perhaps the best process yet devised is that of the Society of Public Analysts of Great Britain, given at length in various numbers of the *Analyst*.

The amount of water present in normal milk does not vary very much, nor does that of ash; but judging from the report of over 12,000 analyses, made by Dr. Viette for the Aylesbury Dairy Company of London, that of the fat in cows' milk does vary from 3 per cent. to between 5 and 6 per cent. Any result less than 3 per cent. is regarded as proof of adulteration. So far is the amount of water, ash and fat from being regarded as agreed upon among analysts, that the problem with them generally has been to obtain a method which

would enable them readily to ascertain this latter factor; and Mr. Hehner has constructed, as a means to detect adulteration, a table showing the relation between the specific gravity and the fat present, the solids *not* fat (*i. e.*, casein and sugar), being taken as constants. To what extent these are really so may be judged from the analyses of Dr. Viette, above quoted, showing a maximum of 10.31 per cent. and a minimum of 8.97 per cent. in over 12,000 analyses. The total average is about 9.5 per cent. in cows' milk. But all cows' milk is not alike; that from different breeds has marked peculiarities and differences, perceptible even to the eye and the taste. The milk from the Jersey cow is rich in fat, but poor in casein and sugar; that from the Durham is comparatively watery, and poor in fat and sugar, though relatively rich in casein; that of the Devon is nearly as rich in fat as that of the Jersey, and in casein as the Durham, and richer in sugar than either of them. The commercial uses of these breeds in butter and cheese making, bear out the above statements.

Another reason for thinking that 1 per cent. is too low an estimate of the amount of casein in human milk, is that such a proportion would hardly supply the needed amount of nitrogenous food to the infant. Lehmann tells us that the amount of milk secreted daily by the human female may be estimated at 2.2 per cent. of her weight; so that a woman of 150 pounds would produce 3.3 pounds milk, or 23,100 grains—rather more than a quart and a gill. If only 1 per cent. of this is casein, it would give only 231 grains; if she weighed only 120 pounds, there would be only 2.64 pounds of milk, of which only 185 grains would be nitrogenous. Authorities on diet tell us that the human being requires food amounting to one-twenty-fourth to one-twentieth of his weight, of which one-fifth, or 1 per cent. of the whole, should be nitrogenous. Applying this rule to the infant, which has certainly larger needs for food for development, a weight of 10 pounds, or 70,000 grains, would require 700 grains of nitrogenous food—a figure nearly approximating that which would be yielded by a milk containing 3 per cent. of casein. In colostrum, however, we have a fluid poor in casein, but rich in sugar and fat.

Casein and sugar, we are told by Lehmann, are both soluble to some extent in alcohol. I have studied the question of the identity of casein of cows' and human milk, without being able fully to satisfy myself, but am inclined to regard them as differing mainly in coagulability. This may depend on the salts with which they are associated, as may also the acidity or alkalinity of the milk. These salts have, relatively to the serum of the blood, a preponderance of phosphates and potassium salts to the chlorides and sodium salts; and the acidity or alkalinity of cows' milk is influenced by their food. As a rule, I believe it is alkaline.

I am in the habit of directing, as food for newborn infants, a mixture resembling colostrum—one part cows' milk to two or three of water, with a little sugar, for infants of two to six months; equal parts of milk and water, warmed and sweetened, for infants over six months; two parts milk and one of water, etc. As to quantity and frequency, much must depend on the child.

Dr. Parish: I cannot pass judgment upon the chemical question, but the matter of substitutes for human milk is one that I am brought face to face with every day in private practice, and in public institutions. I have had but little successful results with any of the prepared foods in the market, except condensed milk. I have frequently been called to see infants who have been seriously sickened by the use of such foods, or by other ill-advised articles of infant diet.

If I have care of a child from birth, who is to be brought up without human milk, I begin with condensed milk; during the first few days I direct that one heaped teaspoonful should be dissolved in thirty teaspoonfuls of water; about the end of the first week one teaspoonful of the milk in twenty-five of water; at the end of a month one teaspoonful in twenty of water; at about the end of the second month I have added one-fourth cream; at the eighth month a change is made to cows' milk, diluted with one-third water, with occasional use of beef-tea, etc., according to the age.

I do not think a child using condensed milk for sixteen or eighteen months continues to thrive so well as if the method stated is resorted to. Cows' milk is unsafe for young infants in the cities.

The addition of cream is advantageous by overcoming constipation accompanying the use of condensed milk, and by contributing very perceptibly to the nutrition of the infant.

If a child, dependent chiefly on cows' milk, is taken sick, with bronchitis or any febrile disease, or with any digestive derangement, I recur to condensed milk as a sick diet.

Dr. Meigs, in closing the discussion, said: I do not see that anything has been said to disprove what I have advanced, which was, substantially, that if analysis shows the water, fat, sugar, and salts of milk to equal a certain amount, then the casein can only equal the difference between that amount and the total quantity of milk taken. We know what these four substances are, and can identify and estimate them. What casein is, however, is not yet fully understood; but we cannot escape from the conclusion as to its small amount in human milk, unless the process of analysis be shown to be erroneous in regard to some one of the other four constituents. I have noticed, incidentally, that the clear ethereal solution of the fat of milk sometimes lets fall a precipitate after standing. This I at first thought to be casein, but as it melted when warmed, it must be some one of the forms of fat, but is insoluble in ether.

I do not think that the specific gravity is any guide as to the composition of milk—Mr. Wanklyn has shown its utter unreliability; nor do I think that we can distinguish the different amounts of sugar or casein in milk by the difference of taste or amount of coagulum. Milk-sugar has very little sweetish taste. The composition of milk is tolerably constant; it is not subject to such large variation within normal limits as urine is. Milk does vary much in its amount of fat. That first drawn from a woman who has not nursed her child for some hours, will usually contain only two or three per cent. of fat, while that taken just after nursing may contain nine per cent.

As regards the amount secreted by women,

very absurd statements—much below the proper figure—have been made by some of the older authorities, but Dr. John F. Meigs succeeded in one case in getting as much as three pints in twenty-four hours.

The salt which exists in largest quantity in milk is sodium phosphate. Cows' milk is almost always acid, while human milk is almost always alkaline in reaction.

Most authorities agree that cows' milk must be diluted when used for infants. Why is this, if not because the casein is less in human milk?

I agree with Dr. Parish that most of the prepared foods are not good. Condensed milk is largely used by physicians in this city, and I believe its success is due to the fact that it gives only about one per cent. of casein, as usually directed to be given. Condensed milk contains about fifty per cent. sugar. It is not unlikely that some of the milk-sugar is removed from it. Milk-sugar and casein are entirely insoluble in absolute alcohol, and alcohol will only take up very small quantities of milk-sugar as it becomes dilute, and only when it is very dilute will it take up any considerable amount.

My effort has been to place the demonstration of the amounts of the different constituents of human milk, so far as possible, upon a mathematical basis; and unless it can be shown that the estimate of some one of the four constituents—water, fat, sugar, or salts—is wrong, then it has been proved that human milk contains only the small amount of casein stated.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Dr. John H. Packard read a paper entitled

Report of a Case of Abdominal Tumor Somewhat Resembling Pregnancy in a Young Married Woman.

I venture to hope that the following report of a case presenting some unusual features may be of sufficient interest to warrant me in bringing it before the College:

Mrs. G., æt. 21, a very slim and delicate-looking woman, consulted me on the 21st of July in regard to a slight and uniform abdominal enlargement, which had been first noticed by her shortly after her marriage, about three months previously, and had been gradually and steadily increasing. She menstruated regularly every month, and had had no nausea. Neither the breasts nor nipples showed any change from the virgin state.

There was no tenderness at any point in the abdomen, and the appearance and feel of the swelling were very much such as would be presented in the early stages of pregnancy.

On the 26th I saw her again, and made an examination per vaginam. The os uteri was soft, and the cervix was of some length; but there was a bulging above, as if the uterus contained a mass partly solid and partly liquid. I did not, of course, think it right at this time to introduce a sound, as, in spite of the absence of rational signs, the presumption seemed to me to be in favor of pregnancy. One fact seemed to militate against this view, viz., that she rather lost than gained flesh.

I declined to express any opinion as to the

character of the swelling, but told the husband that my hope was that the case would prove to be one of pregnancy, as it was likely otherwise to be very grave.

There was a good deal of pain on either side of the hypogastrium, apparently due to tension of the muscles; this was temporarily relieved by the use of chloroform liniment. She had very little appetite, and I gave her a tonic composed of nuxvomica and gentian.

The swelling continued to progress steadily, and on September 13 she presented the appearance of being about the middle of the fifth month of gestation. The hypogastric pain troubled her greatly, and was only allayed for a very short time after each application of the liniment.

At the desire of the family, I now asked and obtained the advice of Dr. Ellwood Wilson, who saw her with me on September 15.

In the forty-eight hours which had elapsed between my previous visit and this one, a very marked change had taken place. The abdomen had become greatly enlarged, its walls forming one curve from the ensiform cartilage to the pubes; there was very decided fluctuation, and percussion showed an area of dullness, which was attributed by Dr. Wilson to the existence of a cystic tumor connected either with the Fallopian tube or with the broad ligament. A sound was introduced into the uterus, the cavity of which was found to be unoccupied. Dr. Wilson advised the drawing off of the liquid, which was accordingly done by aspiration on the 17th. More than a gallon of ropy yellow liquid, somewhat deeply tinged with blood, was thus removed; the flow then ceased, and the end of the canula encountered a solid substance, apparently a septum of considerable thickness. Upon the withdrawal of the instrument, a fresh flow took place, the liquid spouting out from the orifice to a distance of several inches. When this subsided, the abdomen, which was much less tense, was covered with raw cotton, and a bandage carefully and firmly applied.

During the operation, the patient became quite faint, but rallied after the administration of a little brandy and water. In the evening her temperature arose to 103.5°, but before morning it fell to about 100°. She slept very little, and complained of much pain, due partly to the stiffening of the cotton and bandage by the agglutination of some of the liquid which oozed from the belly. On examining the wound in the morning, it was found closed.

The following evening the temperature again rose to 103.5°, but subsided again before morning, and was not thereafter above 99°. Yet her condition was unsatisfactory; her face was much pinched, and anxious; she had very little appetite or ability to take food; at times her mind wandered slightly, and she slept but little. Vomiting occurred frequently, and she was seldom free from nausea. Her bowels acted regularly; her urine was free, and normal in every respect. Her pulse varied, but was generally from 110 to 120.

Beef-tea, milk, with brandy and lime-water, and champagne, were given at as short intervals as the stomach could bear them, and at stated times. External warmth was carefully kept up.

It was determined that should symptoms of

peritonitis present themselves, ovariectomy should be at once resorted to.

A portion of the liquid was submitted to Dr. H. F. Formad for examination, and his report, which was not received until some time after the case had terminated, was: "I think it very doubtful that it comes from an ovarian cyst, the fluid showing very little epithelium, and very few of the ovarian cells of Drysdale."

September 23, her condition was very much more favorable; her mind was composed and even cheerful; her pulse and temperature good. Some food had been taken and retained.

On the 24th her state was much the same, and it was thought proper to entertain the idea of an operation for the removal of the supposed ovarian tumor. In the afternoon Dr. Agnew saw her with Dr. Wilson and myself, and it was decided that the attempt should be made on the following day.

Accordingly, on the 25th, at noon, ether was administered by Dr. G. P. Sargent, of Bryn Mawr, and in the presence of Drs. Wilson and Agnew, I opened the abdomen by an incision in the median line. After dividing the wall I came to what seemed to be a cyst, and passed in an ovariectomy trocar, when a very free evacuation of liquid, straw-colored and ropy, but clear, took place. It was now apparent that the liquid was contained in the peritoneal cavity, and that there was a large solid mass lying among the intestines. This tumor was soft and doughy, like a placenta; it seemed to belong to the mesentery, since although somewhat movable, it was firmly attached to the posterior wall of the abdomen, rather high up. The surface of the mass having been slightly lacerated, there was somewhat free bleeding, which was checked with some difficulty by ligation with carbolized catgut, and by the application of a caustery-iron.

The wound was now closed with two large pins and a ligature cast around them, and with metallic sutures; a sheet of raw cotton was applied over the whole belly, and secured by a bandage.

The patient rallied considerably, and after the effects of the ether had passed off, became quite sensible; but she soon began to sink, and died on the 27th, about forty-eight hours after the operation.

No autopsy could be obtained, so that the exact nature and connections of the tumor must remain a matter of conjecture.

The notable points in the case now detailed seem to me to be the occurrence of a solid tumor, probably of malignant character, and apparently connected with the mesentery, in a young woman recently married; its resemblance in its physical appearances to the pregnant womb; the very sudden change that took place by fresh effusion into the peritoneal cavity, and the obscurity which even then existed as to the real nature of the case. Even with the most accurate diagnosis, effective treatment would have been out of the question; and I cannot but think that my suspicion of pregnancy, erroneous as it proved to be, really prolonged the patient's life, which would have been almost necessarily sacrificed by earlier interference.

—Prof. DaCosta teaches that arsenic, in small doses, is very useful in chronic gout.

EDITORIAL DEPARTMENT.

PERISCOPE.

Primary Cancer of the Gall Bladder.

Dr. A. H. P. Leuf reports this case in the *Proceedings of the Medical Society, County Kings*, February, 1884:

The following case occurred in the service of Dr. Geo. H. Kuhn, at St. Mary's Hospital. The accompanying meagre history is all that could be obtained, and is furnished by I. H. Platt, M. D., House Physician at the hospital:

Female; æt. 70 years; English; married; and housekeeper.

She was sent up from the down-town St. Mary's, without a history. She had been feeling badly since last winter, and for the last two months has been jaundiced. At time of admission she complained of great pain across the abdomen, also seemed very weak. The abdomen was enlarged. The liver extended down almost to the crest of the ilium and hard masses could be felt projecting from it by palpation. Gave M. viii. of Magendie's solution which partially relieved the pain. She sank rapidly during the night and died the next morning at 9.30 o'clock.

Autopsy.—Body markedly emaciated. Average rigor mortis. Deep lemon-yellow color of skin all over the body. Both lungs were emphysematous (senile) and hypostatically congested. The heart was flaccid and contained a little blood. The stomach was about half full of liquid food and gas. Its pyloric portion was adherent to the gall bladder and hepatic end of the transverse colon. On raising the liver from the stomach, a small piece of gastric wall, about .5 cm. in diameter, stuck to the liver and left a corresponding opening in the stomach. This hole was a post-mortem accident, but must have happened ante-mortem in a short time had the patient lived a little longer. The gut was contracted, and the colon was agglutinated as just mentioned. The liver was very much enlarged, its right lobe extending down to the anterior superior iliac spine, and the left as far down as the umbilicus and over against the ribs of the left side. It contained cancerous nodules varying in size from a pin's head to 6 cm. in diameter. The gall bladder was very long, and contained eighteen good-sized stones. One was different from all the others in its being dome-shaped, with a flattened base and granular surface. It occupied the distal end of the gall bladder, and was about 2 cm. in diameter at the base. The free end of the gall bladder was normal, but its narrower half was thickened so as to measure fully 2 cm. through any part of its upper wall. This part of the viscus was almost as firm as cartilage, and it was at this point that the gall bladder, stomach, and colon were adherent. The spleen was normal in size and otherwise. The pancreas was slightly indurated at the head. The right kidney was congested and the left anæmic. The uterus contained a hard cancerous nodule in its anterior wall at the cervicocorporeal junction. It measured about 2 cm. in diameter.

It is probable that the congestion of the right kidney was secondary and due to the hepatic disease, and that the anæmia of its fellow was dependent upon the poor general health of the patient.

Hepatic carcinoma may be either primary or secondary. The former is rare, the latter occurs frequently by metastasis. The variety is usually scirrhus, but sometimes is encephaloid. When primary, it appears as a large mass surrounded by smaller ones, and when secondary, large and small masses occur indiscriminately throughout the organ. Primary cancer of the gall bladder is more common, and it is almost invariably of the scirrhus variety, as might be supposed *a priori* from the structure of this viscus. In this form of cancer of the gall bladder the cavity is diminished at the same time that general enlargement takes place, *i. e.*, there is a thickening of the wall internally and externally. The cavity is often filled with calculi (as in this case). When the bladder is thus affected, it forms adhesions to all the structures with which it is brought in contact, and subsequently induces in them locally the same trouble. The liver is the most frequent seat of secondary carcinoma. Cancerous changes in the liver are most marked in those parts adjacent to the primary infecting focus, provided that it is in contact with the liver, as the stomach, hepatic flexure of the colon, gall bladder, etc. Umbilication is also a marked characteristic of the cancer nodules found upon the surface of the liver. It is caused by a breaking down of the centre of the cancerous mass and its consequent absorption, thus resulting in a falling in of the middle of the surface of the moplasic nodule, while the healthy margin preserves its original relations. The liver is also larger in the encephaloid variety of cancer than in the scirrhus variety. The reason for this is obvious, as the growth of the former is more rapid than of the latter, and in this wise allows the affected organ to attain a larger size in a given time, *i. e.*, before death. Hepatic carcinoma is also peculiar in that it invades branches of the portal vein, forming inward projections having a warty appearance and a sessile attachment. Sarcoma hepatis is frequently said to exist when the affection should properly be classed as a carcinoma. Sarcoma of the liver, it is well to bear in mind, is very rare, only occurring as a secondary formation, and then almost always derived from the melanotic variety.

The Treatment of Habitual Constipation.

Dr. F. P. Atkinson thus writes in the *Practitioner*, January, 1884: I suppose there is no derangement of the system we are more frequently called upon to treat than habitual constipation; and though all kinds of medicines are suggested for its relief, they rarely produce more than temporary benefit—and it is difficult to see how the result can well be otherwise, while the root of the evil remains untouched. Now by far the more numerous subjects of this disorder are women;

and as they do not seem to know that regularity is essential to the performance of every one of nature's operations, they appoint no stated times for trying to get the bowels relieved, but trust to receiving intimation when the rectal accumulation and distension can be borne no longer. This method of action may and does answer fairly well for a time; but nature gradually gets upset, the sensation of the lower bowel becomes blunted, and at last it ceases to respond to the ordinary stimulus. Then aperients are regularly resorted to, and though these act fairly well for a time, they gradually have to be increased in strength and frequency. Now, as regards the treatment, the first thing to be accomplished is of course to get the rectum well relieved; the next, to get the actions to take place at fixed times; and lastly, it is necessary to get more tone imparted to the muscular tissue of the bowels, so that the regularity of action may be helped and also maintained. In order, then, to get the bowels relieved in the first instance, it is as well to give five grains of both compound colocynth and compound rhubarb pill at bed time (this rarely requires to be repeated), then to take a tumblerful of cold water the next morning on waking, and repeat it regularly at the same time each day. Should the bowels remain sluggish for some time, the same quantity of water may be taken daily before each meal. Supposing no action takes place on rising or shortly after, a small injection of warm water may be resorted to. After each movement of the bowels, a small hand-ball syringe of cold water should be thrown into the rectum and retained. A soup-plateful of coarse oatmeal porridge (made with water and taken according to the Scotch method, viz., by filling half the spoon with the hot porridge and the other with cold milk) each night at bed-time, or even every night and morning for a time, is often a very great help. But above all things, it is necessary for the patient to *try* and get relief at a certain *fixed* time regularly every day. If these directions are strictly carried out in their entirety, the evil, even if it has been of long standing, will generally be corrected, and the patient will improve in health and appearance. Of course, where the constipation results from exhaustion of the nervous system (such, for instance, as is brought about by self-abuse), the special cause has to be taken into consideration, and such treatment adopted as is suited to the particular necessities of the case.

On the Treatment of Hay Fever and Allied Disorders.

In a very valuable paper on this subject in the *American Journal of the Medical Sciences* for January, 1884, Dr. Harrison Allen claims that the means of effecting the cure of this hitherto considered incurable disease is simply to overcome the tendency to obstruction in the nasal chambers.

The symptoms of hay fever are always associated with some degree of obstruction of one or both nasal chambers. A cause of this obstruction is dilatation of the blood-vessels. There is no doubt that the local phenomena are in most instances the same, and that the multiform related symptoms, such as injection of the eye, headache, malaise, asthma, etc., are due to reflex vasomotor

disturbances. But many patients report for treatment who exhibit swelling of the nasal mucous membrane, occlusion of the respiratory passages, and mucoid or semi-purulent discharge, without any of the related reflex phenomena. Yet a third and intermediate group exhibit perhaps a tendency to turgescence of the mucous membrane, together with one or more of the more common constitutional symptoms of typical hay fever. Indeed, there is nothing peculiar to the disease just named save its sharply defined periodicity, particularly in that phase of it where the periods of recurrence happen to coincide with the time of fruitage of certain plants, or the gathering of certain crops. In a small group of cases, where, in addition, other signs and symptoms become prominent which would invalidate the above proposition, Dr. Allen is inclined to attribute them to mental impression—in some of the varied phases of hysterical or neurotic excitement.

Or the case may be stated in different language, as follows: In an imperfectly defined group of cases of nasal catarrh, a sensation of sudden obstruction of one or both nasal chambers is a conspicuous symptom. This sensation is accompanied by a constant change in the chambers themselves, viz., engorgement of the membranes over the turbinated bones, producing pressure against the septum and occlusion of the respiratory passages of the nose. The sensations are recurrent, but vary greatly as to the time of the day or the season of their return. With some patients they are nocturnal, and are associated with the recumbent position; with others they occur after meals only; with some they occur in the summer season; with others yet again, in the winter. The sensations may be confined to either chamber, or be present in both. In aggravated cases they are associated with numerous reflex symptoms, among which may be mentioned lachrymation and hyperæsthesia of the conjunctiva, headache, and asthma. Patients having a disposition to obstruction during the summer and autumn report themselves as suffering from "hay fever;" while those having alternating attacks in the right and the left chambers report with "nasal catarrh."

The cases so far studied exhibit one feature in common, viz., that the inferior turbinated bones lie well above the plane of the floor of the nasal vestibule. In many persons, not the subjects of "hay-fever" and allied disorders, the lower free portion, including, of course, the inferior border of the bone, lies below the plane of the floor of the nasal vestibule; and in ordinary inspection the inferior meatus is out of sight.

It will thus be seen that the mucous membrane, which is known to be the most erectile, is also the most exposed to irritation from extraneous substances, and to changes in the temperature of the surrounding air.

The conclusions to be drawn from the study of the six cases reported by Dr. Allen may be summarized briefly as follows:

1. That the treatment of all conditions of obstruction in the nasal chambers, no matter from what cause arising, can be successfully carried out by destroying the causes of obstruction. If the cause be an overgrowth of bone-tissue, if must be filed, sawed, or drilled away. If it be caused by a deviated cartilaginous portion of the septum,

such portion must be re-set in a new place. If, as is often the case, it is due to periodic turgescence of the mucous membrane, or the resulting secondary hypertrophies, such growths must be destroyed, either by the galvano-cautery, by the snare, or by caustic acids.

2. That the treatment of hay-fever and allied periodically-recurring nasal affections in no way differs from the treatment of other nasal diseases accompanied by obstruction, and that the treatment may be conducted during an attack as well as in the intervals between any two attacks.

Foot-measurements in New-Born Children. A Contribution to the Treatment of Pelvic Presentations.

The *Am. Jour. Obstet.*, January 1884, says that Gonner, in the *Ztsch. f. Geb. u. Gyn.*, ix., 2, complains that the most systematic authors in obstetrics say too little in regard to the difficulties which accompany extraction in breech presentations, whether these difficulties be primary or secondary to turning. The importance of knowledge upon this subject can be appreciated when we remember its bearing upon prognosis in respect to the life of the child. We have methods sufficiently accurate for ascertaining the dimensions of the mother's pelvis, as those of the child's head; but nothing has heretofore been offered which would enable us to get a good general idea of the size of the fœtus in utero. Ahlfeld's method with the instrument (Tasterzirkel) devised by him is inaccurate, and gives useless results. In order to obtain an approximate idea of the size of the child, we must get an accurate measurement of some part which is accessible, and this part must bear a tolerably constant relation to the size or proportions of the entire body. Such a part in breech presentations is the foot. In order to ascertain whether the length of the foot stood in any particular relation to the weight of the child, measurements were taken in one hundred consecutive births, during the year 1881, at the Basle obstetric clinic. The measurements were made immediately post-partum, with a wooden instrument similar to that which is used as a measuring-stick by shoemakers, and in a similar manner. In a procedure which is apparently so simple, great pains are necessary, for the differences in the length of the feet of new-born infants are slight. As a result of the author's labors in the cases mentioned, the conclusion reached was that for a length of foot of eight centimetres a total weight of three thousand grammes might be expected as a rule; also that a length exceeding eight centimetres made it probable that the child's weight exceeded that of the average mature fœtus, and that extraordinary difficulties in extraction might be expected. By considering, in addition, the measurements of the maternal pelvis, data are afforded, says the author, which will enable us to prognosticate the birth of a living child, or the necessity for a destructive operation. It must be borne in mind always that these calculations have no reference to hydrocephalic children, and those who are subjects of other deformities. A foot which measures seven and six-tenths centimetres in length presupposes a child of moderate size; a length of less than seven and three tenths centimetres presup-

poses an immature fœtus. In the tables which are given by the author, a tolerably constant difference in weight is observed, between male and female children, in cases in which the feet of both sexes are of the same length, the females being the heavier; but this is not considered of any especial importance in an obstetric point of view. The occupation of the parents, also, has something to do with the size of the hands and feet of the offspring, and as the measurements in the tables referred to were taken upon children in the poorer, or working classes, the relative weights are, probably, larger than would obtain among the children of those who are not habitually engaged in severe manual labor. Race and national peculiarities may also require consideration, and it is to be hoped that the subject will be worked in other fields, for the perfection of the desired statistics.

Tubercle and its Resistance to Antiseptics.

The *Med. Times and Gaz.*, December 29, 1883, says: In a previous number of this journal (vol. ii., 1882, p. 669), a brief notice will be found of a paper which appeared in the *Revue de Médecine*, by M. H. Martin, demonstrating the extraordinary power of resistance enjoyed by the tuberculous virus against high temperatures and the effects of alcohol. In the October number of the same periodical there is a further communication from the same author, in conjunction with his deceased teacher, M. Parrot, detailing the results of experiments with salicylic acid, sulphate of quinine, corrosive sublimate, carbolic acid, creasote, bromine solution, and oxygenated water. The plan adopted was to take a portion of the tuberculous viscera of an animal that had just died of tuberculosis, and place it in the solution to be tried. After it had been left a varying length of time in such solution, inoculation-experiments in fresh animals were made, to see if it would induce tuberculosis. The solutions used varied in strength from one in 5,000 to one in 500, and it may be said that none of the above reagents succeeded in destroying the infective property of the tuberculous material with anything approaching constancy. The authors conclude their paper with the following practical remarks: "It is thus clearly proved that the vitality of the tuberculous virus is considerable. In therapeutic doses the antiseptic agents actually in use are powerless to destroy it, and the daily failures in practice seem, so to speak, borne out by what has already been shown. Again, it is perfectly clear from our experiments that the antiseptics in daily use are powerless against it. We wash instruments in alcohol or in a solution of carbolic acid (1 or, at most, 2 per cent.); we moisten the walls or the floors of our hospitals with the same solution; and are quite willing to believe that, in consequence of this, all germs, including those of tuberculosis, are rendered inert. It is easy to understand that such an illusion may bring about grave consequences. Even the sulphurous vapors advised by M. Vallin, even the vapor of bromine, which is still more caustic, can only act when tolerably concentrated and after some length of time, and in this case their employment becomes dangerous and difficult. - The only agent which

germs, be they what they may, cannot resist for a single moment, is fire. Now, we know that at 100° the tubercle loses its infectious property in a very little while; and a temperature, even dry, of 120° to 125° destroys this power almost instantly. We must conclude that a heated stove is the only certain and practical purifier of instruments for surgical or experimental operations, for clothing, linen, and dressings; in short, for all objects whose shape and size admit of their being introduced into it. As regards the walls, floors, etc., of private rooms or hospital wards, it would be possible, it seems to us, from time to time, to submit them to the action of a current of air heated to about 125°, which, being brought by means of suitable portable tubes, and distributed just as one directs a jet of water from a pump, would dry and calcine the infectious germs hanging about the plaster, pictures, or woodwork, without sensibly damaging them." Such are the precautionary hygienic measures the authors recommend for adoption against the contagion of tuberculosis.

The Treatment of Acute Nephritis.

The *Lancet*, December 29, 1883, says:

There are few diseases which give rise to more anxiety in their treatment than those in which the kidney is concerned. With regard to both the precise pathology of renal inflammation and the therapeutics of this disease, much unquestionably remains to be determined. True, there are well-recognized principles to be followed in practice—namely, first, to give the inflamed organ rest, and therefore neither to irritate it by so-called diuretic remedies, nor embarrass its action by giving nitrogenous food; second, to see that the skin, which may be regarded as the *alter ego* of the kidney, is called into vicarious action. In spite of these guiding principles, however, acute renal inflammation remains often the despair of the physician. Dr. Aufrecht, of Magdeburg (*Berlin Klin. Wochenschr.*, December 12), who, as is well known, has paid much attention to the pathology of nephritis, advocates most forcibly the adoption of an expectant line of treatment, in which dietetics play an important rôle. He absolutely discountenances the prescription of diuretic and diaphoretic drugs, and regards it as not good practice to encourage diaphoresis by hot baths or heated air. We go with him in his condemnation of diuretics, or of those salts which act notably on the kidney, and which we are persuaded are often given unnecessarily, and perhaps with injury; but in his objection to diaphoresis he seems on less secure ground. His plan consists in the administration of neutral salines, as bicarbonate of soda, which may be replaced by iron in the later stages, when the anæmia evoked by the albuminuria appears. The diet at first must, he says, be wholly vegetable, in the form of vegetable soups, and starchy and saccharine foods; even milk is to be avoided till after the first or the second week of the acute attack. This rigid regimen is necessary to diminish the special function of the kidney—elimination of nitrogenous matters. He quotes Lichtheim and Senator in support of this doctrine, which recognizes in the defective elimination of the kidney a much

graver incident than the outpouring of albumen, and which, therefore, emphasizes the necessity of reducing to a minimum the ingestion of proteids. Aufrecht details one case (of scarlatinal nephritis) where suppression of urine lasted for eighty hours, and where this expectant treatment was followed by recovery. He mentions another, where the anuria lasted for fourteen hours; and he asserts that under the diuretic and diaphoretic plan of treatment cases such as these would almost certainly have succumbed. To avoid misconception, we should add that he prescribes a warm bath occasionally in such cases, but never to the extent of inducing profuse diaphoresis, and that he makes no mention of free purgation. Probably he would discountenance this, as another measure of harmful interference.

Creasote in Diseases of Air Passages.

Dr. Pick, of Coblenz, says (*Deutsche Med. Wochenschr.*, 1883, No. 13), that the action of creasote in consumption, recently much extolled by the French (Bouchart and Gimbert), as well as the successful experiments of Fränzel and Curschmann, induced him to employ this much discredited remedy in a series of cases, and to make a summary of the results. Creasote was given by the author both internally and externally. For external use he employed a mask which, being a modification of Hausmann's apparatus, could be worn by the patients without much difficulty, and even during the night. The creasote was dropped on the cotton-wool in the mouthpiece, and was inhaled by means of deep inspiration. The apparatus has the advantage over Hausmann's that the nose remains free, and the troublesome irritation of the nasal mucous membrane is avoided. Dr. Pick gave the creasote internally either with cod-liver oil, or according to the French formula: Kreasoti 13.00, tinct. gent. 30.00, spirit. vini rectif. ad 250, vini Malag. ad 1,000. The drug was well borne by the patients both internally and in the form of inhalation, and Dr. Pick speaks of one case where there was a decided antipathy to cod-liver oil, but where it was taken quite well in the above-mentioned combination. Gastric disturbances or toxic effects were seldom perceived. Among the cases treated by the author was one of croupous pneumonia passing into gangrene, thirteen of tuberculous infiltration in persons with hereditary taint, and one of sudden hæmoptysis after long-standing catarrh of the lung. The results were very good in all sixteen cases; after a short use of the drug, diminution of the cough, considerable reduction of temperature, improvement of the general health, and decrease in the expectoration quickly ensued; and the hæmoptysis mentioned above, which had not yielded to a fourteen days' treatment with ergotin, was speedily checked by a few hours' inhalation of creasote. This may, perhaps, be attributed to the styptic action of the creasote, which, besides its disinfecting and antipyretic properties, coagulates albumen and contracts the capillaries. A lasting effect was, however, observed to follow the employment of creasote only in catarrh of the apex, or in commencing infiltration. In advanced phthisis, where extensive disintegration of tissue with great diminution of strength was already

present, the only lasting result was the alleviation of isolated symptoms. Dr. Pick lays particular stress on the quality of the creasote, and attributes its actions only to that got from beech-wood tar, in contradistinction to the kind more frequent in commerce, obtained from coal-tar, whose qualities, so far from being useful, only set up gastric disturbance.

Thirteen Cases of Herniotomy for Strangulated Hernia.

Before the Medical Society of London (*Brit. Med. Jour.*, December 15, 1883), Mr. Keetley read a paper on this subject. Of these cases five were femoral, seven inguinal, and one umbilical; three died. Of course, such small numbers were of no value statistically. For example, at St. Bartholomew's, in 1876, only two cases of inguinal herniotomy died out of ten, while, the very next year, six died out of seven. After discussing the probable cause of death in his two fatal cases, which he attributed in one case at least to septic infection, the author said that, with one exception, the chief indications of practice of antiseptic ovariologists should be borne in mind by the herniotomists. The exception was the rule, that, in cases of extravasation of blood or other fluid, the abdominal cavity should be thoroughly sponged out, and rendered aseptic. It was absolutely essential that, in herniotomy, all extravasation into, or septic contamination of, the peritoneal cavity should be prevented. To attain this end, he advocated the practice now coming into vogue, both on the Continent and in this country, but especially in Liverpool, of tying the neck of the sac high up as soon as the strangulated bowel, etc., has been reduced. Thus the whole operation-wound, including even the notch in the edge of the femoral inguinal ring, would be entirely cut off from the peritoneal cavity. However, sometimes after cutting the constricting edge, the surgeon found it a work of difficulty and slowness to reduce the swollen intestines. In the meantime, hemorrhage was very likely taking place into the peritoneal cavity. Within certain limits, strict antiseptic precautions made this a matter of indifference. Beyond these limits, it might become a serious matter. Hence, in such cases, Mr. Keetley suggested a second incision of the linea alba into the peritoneal cavity, just above the pubes, merely large enough to admit two fingers, with the help of which the intestine, etc., could be pulled back into the abdomen. When the hernia was known to be quite recent, it would be justifiable to attempt to reduce it by this proceeding alone, with an incision over the hernial aperture. It was so much more rational to attempt to pull back than to push back a soft and flexible loop through a tightly constricting hole. The same principle had long ago been applied to umbilical herniæ by Crompton, of Birmingham, and more recently and successfully by Annandale and Bennett May. But Mr. Keetley had conceived the idea quite independently, and without at the time knowing of these cases. He had not yet himself met with a case in his judgment demanding an application of this plan of a suprapubic incision. He had done Crompton's operation in the case of umbilical hernia which died.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

The Field of Disease. A Book of Preventive Medicine. By Benjamin W. Richardson, M. D., F. R. S., etc., Philadelphia: H. C. Lea's Son & Co., 1884. Cloth 8vo., pp. 734.

With his accustomed erudition, and in his wonted easy style, Dr. Richardson has here presented the doctrines of the etiology and prophylaxis of disease as he understands them. He is, as always, full of instruction, and his exposition has no lack of clearness, but, as always, he is the very earnest advocate of his personal opinions, which are often either in antagonism to those of most members of his profession, or are as yet too slightly supported by evidence to justify any such positive statement. To begin with, his averment (which is quoted with applause by his American publisher in a prefatory note), that the idea that diseases can be prevented is of modern times, and "practically of the later two-thirds of the present century," could be made only by one who is ignorant of the History of Medicine. Our modern methods of prevention are many of them new, but enlightened physicians in all ages have earnestly preached both personal and general prophylaxis.

Again, Dr. Richardson's indiscriminate attacks on all alcoholic beverages are so far from being tempered with the moderation of science, that they cast general doubt on the power he has of framing an unbiased judgment.

The plan of the volume is as follows; it is divided into three parts: The first treats of general diseases, local diseases, and diseases from natural accidents. In this part the diseases are classified according to the accepted English nomenclature. The second part or book treats of acquired diseases, which are divided into those from poisons, from physical agencies, and from mental agencies. The third and last book is a summary of the origins, causes and preventions of disease. This is the most interesting part of the treatise, and is that to which the reader will turn first, in order to gain as quickly as possible the views of the author. It contains a vast amount of solid, valuable hygienic information.

In England, this work was published with a preface recommending it to the non-medical public. It is, we think, much too technical for their use, and is better suited to the physician's office than the family library.

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THE ORIGIN OF THE LATE CHOLERA EPIDEMIC.

Dr. W. G. Hunter, retired Surgeon General of the Indian Army, delivered an address recently before the epidemiological Society, in London, on the recent epidemic of cholera in Egypt, which contains some exceedingly valuable points and much instruction. As we are ready to believe, his arguments all plead strongly for cleanliness as our most available and effective prophylactic against the invasion of cholera.

He very convincingly states that the disease was not carried into Egypt from without, but that, owing to the wretchedly unsanitary condition of the people of Egypt, the disease is more or less prevalent all the time, and on account of unusually unhealthy surroundings during last summer, it increased so much in violence and in number of cases as to constitute a most terrible and fatal epidemic. To give some idea of the filthy condition of this historic old country, we will make some extracts from his address:

"The larger majority of the people drink the water unfiltered, and generally before it has been allowed time to deposit. It is said that they prefer it in this condition. In Cairo the quality of the water supply is indifferent. At the water-works there is but one settling tank, and, as it is in constant use, it can never be cleaned.

"The large amount of mineral matter contained in Nile water, while settling, carries down with it no inconsiderable quantity of the organic substances held in suspension in the water, and must lead to rapid fouling of the tank. Filtration is effected by gravel and sand. In the Ismailia quarter, that is, the fashionable part of the city, and in the Boulac quarter also, no attempt is made to filter the water, but it is supplied as obtained from the Nile. Close to the intakes of the Cairo water-works, where some slight efforts, it is presumed, would be made to prevent pollution of the water, I have seen human and other animal excreta, fresh and stale, lying about in various directions, and men and women bathing, and washing their soiled clothes in the river. This was by no means an uncommon sight.

"In Alexandria, an attempt has been made to establish a sewerage system, but, as in most things Egyptian, a very defective one. In the first place, it is but partial; in the second, it possesses radical defects of construction, and the outlets, some twelve or more in number, pour their contents on

to the beach directly to windward of the city. The sewers are, moreover, unventilated, such ventilators as existed having been sealed up about five years previous to my visit in August last. The privies of the houses are in direct communication with the sewers.

"As a specimen of the quality of the water used by the villagers in Egypt, I would, in passing, call attention to a report made to me by Mr. Honman, one of the twelve medical gentlemen sent to Egypt by Her Majesty's Government for service during the epidemic. This gentleman was in charge of Mehallet-el-Kibir, a town of about 28,000 inhabitants, situated to the north of Tanta, midway between the Rosetta and Damietta branches of the river. Mr. Honman states in his letter, dated August 30, 1883: 'The town has three mosques; the drain from one running through the town, quite open, and with three feet of filth at the bottom. This discharges itself into a pool of water at the back of the town, which is used by the people for domestic purposes, and as drinking-water for their cattle. The other two mosques drain in a like manner into pools outside the town, and they also are used by cattle and for domestic purposes. The stench from these drains can be smelt all over the town.'

"During the past year the water-ways were more than ordinarily polluted by carcasses of cattle which had died from typhus being thrown into them, in order to evade a tax of five francs per head for their burial, which the poverty-stricken fellaheen were quite unequal to pay. It is notorious that many of the fellaheen were reduced to such straits as to be forced to feed on the carcasses of cattle which had died in this way. The number of carcasses and portions of carcasses in a far advanced state of decomposition removed from the Damietta branch of the river amounted to upwards of 1,500, a number considerable in itself, but insignificant as compared with the thousands which must have been thrown into the river. The losses in cattle occasioned by the 'epizootic' weighed heavily on the fellaheen, and reduced them to strange and curious expedients to till the soil.

"The villages are collections of mud-hovels, in which, with the human family, reside all their domestic animals, as pigeons, fowls, asses, goats, and perhaps a camel. In no towns, so far as I know, are there public latrines, except those belonging to the mosques, which are quite inadequate to meet the wants of the people, who are driven to the streets, gullies, and open spaces for natural purposes. This remark applies equally to cities like Cairo and Alexandria."

These extracts are sufficient to demonstrate the terribly unsanitary conditions that surround the people of Egypt, while Dr. Hunter's thoughtful and logical address will make any unprejudiced man believe that filth is the etiological factor of cholera. From it we must derive the valuable lesson, that in cholera as in all other epidemic diseases, our great safeguard lies in scrupulous cleanliness, both of person and surroundings.

FACTORS DECIDING THE SEX OF THE OFFSPRING.

Many a theory has been proposed—and exploded—concerning the conditions which decide the sex in the offspring. Those interested in the raising of horses, cattle, pigs, etc., have doubtless made a more practical progress in this question than physicians have done with regard to the human being. It is not rare to notice that a sheep-grower, for instance, will raise only ewes, if it is his intention to do so.

Recently, Dr. K. Düsing has studied the factors deciding the sex of the foetus, and published (*Centrbl. f. d. Med. Wiss.* 45, 1883,) an interesting article concerning his results; and as the subject has an undoubted vital bearing upon the propagation of the human race, we will not withhold it from our readers.

Fiquet made first the observation on cattle, that those animals that sexually were very much occupied, produced more individuals of their own sex, and D. explains this by saying that the male whose genital apparatus is frequently used, is provided with fresher sperma, so that fecundation ensues with comparatively young and active spermatozoa. In such a case more male offspring are produced; while a male whose sexual organs rarely perform their function, will give rise to more female offspring, because his spermatozoa are older, weaker. In the female the same holds good, the ova being earlier (fresher) fecundated, and a predisposition to the female sex takes place. As a natural consequence, it follows that the more there is a want of individuals of one sex, the more their sexual functions are required—the quicker, the younger their sexual product is

made use of—the more members of that sex will be born. It is simply the law of nature to propagate the species.

The same effect as sexual over-exertion is also produced by deficient nutrition, if the same demands are made upon the genital apparatus. Weak bulls paired with vigorous cows produced invariably male calves, while weak cows paired with vigorous bulls gave mainly birth to female calves (Tellari and Fiquet).

Next of importance is the age. At the time of the greatest sexual power, the individual of each sex never transfers his (or her) sex to that of his (or her) offspring, or does at least much less so; in most human families there are then found the most boys if the husband is much older than the wife. (Hofacker, Sadler.) It shows the intention of nature to produce more individuals of that sex which threatens to die out; the weaker, the older the propagator, the more care nature takes to have his sex propagated.

Thus far the influences concerned one sex. In case the disturbances of nutrition affect both parties the rule holds good, that where there is a superfluity of nutrition the reproduction is stronger, where a want, it is weaker. The genital system is first influenced by nutrition. (Darwin.) But it is especially the female who is more dependent upon nutrition, probably because she has to care for the bringing-up of the offspring. The logical conclusion is, that in case of superfluity of nutrition more females are born, in case of want, more males. Thus Ploss found that in the same ratio as the price of provisions advanced, the number of male children increased. (Or may not the cause be the following? It is the male that has to work hard; it is the male that suffers soonest by bad nutrition; the male, therefore, becomes soonest the weaker; therefore the result.

Laudvis procured from thousands of very young caterpillars of *vanessa urticæ*, males or females, whatever he preferred, by nourishing them either badly or well. In some of the lower animals, the females find their nourishment mainly in summer, the males in winter. In these more females are born in summer, the males in winter.

D. draws from these observations the conclusions: the sexual relation regulates itself by the property of animals and plants to produce that sex in greater numbers whose relatively greater augmentation is profitable for the propagation of the species. Even an anomalous sexual relation may benefit under special circumstances the propagation. The sexual difference may rest in the unimpregnated ovum (for instance, tendency of young ova to female sex), or the sex is determined at fecundation (young spermatozoa, males), or the nutrition (strength, age, food) decides.

Although these theories find an undeniable proof in observations and experiments made on animals (and some on human beings also), we have to be very cautious in admitting their truth. Other factors, at present unknown, probably determine, besides those mentioned, the sex of the foetus; it is even doubtful whether the latter is already definitely decided at fecundation, and whether later influences may not have their share in ordaining the sex.

DANGER FROM QUININE.

Our exchanges have considerable to say just at present about the dangers that may exist in the administration of quinine, and the injurious results that sometimes follow its use.

While it is well to utter words of caution, yet it seems almost like waste of time to caution physicians that quinine may be, in certain cases and under certain circumstances, a dangerous article; for we take it that every ordinarily well-informed medical man is thoroughly aware of this fact.

We know that quinine is one of the most valuable drugs in our possession when properly and intelligently used; and we also know that it is no exception to the rule, which holds good with all drugs, that if used when not indicated, or in a wrong way, it is capable of working harm.

If, for instance, we desire to give quinine for its tonic effects only, and we order five or ten grains thrice daily, we will do more harm than good; while, on the other hand, if we endeavor to control a well-marked intermittent fever with one or two grains, our experience will be similar to that

of the man who endeavored to extinguish a burning factory with a small syringe of water.

In a word, the indications for the use of quinine would seem to be about as follows: For intermittent and remittent fever (where we use it as a specific), we must give it in large doses an hour or two before the expected paroxysms, and in smaller doses during the intervals, until we have controlled the morbid process, or until symptoms of cinchonism supervene, when its use must be intermitted.

To reduce temperature in continued fever, it would seem best to give it in large and decided doses (10 to 20 grains) and to be guided in its repetition by the effect produced. To obtain its tonic properties, we should use it in small doses (1 or 2 grains thrice daily), and continue its use until cinchonism calls for a halt.

Thus, then, with quinine, as with opium, while valuable beyond all calculation in our warfare with disease, we must be careful to intelligently and clearly understand what we wish to accomplish from its use, else we may not only do no good, but actually do harm.

OUR SELF-SUFFICIENT EGOTISM.

It seems hard to find words sufficiently emphatic to characterize the—what shall we call it?—egotism, or blindness, or obstinacy of those who control the affairs of cities. Our outburst of indignation is caused by reflection upon the methods of supplying water to and removing refuse from our large cities.

In the matter of water supply and sewerage, our large American cities are in a condition of *barbarism*.

The experience of all time and of all peoples clearly proves to us that our methods have no elements of correctness about them; and yet, like poor, blind fools, we allow ourselves to be treated so shamefully that the condition of the wandering savage presents a sanitary elysium in comparison with our hygienically besotted condition. Can we not force ourselves to sink our egotism in the ocean of experience, and profit by the history of the world, in these two prime questions of water supply and sewerage?

THE BITE OF AN EPILEPTIC.

In England, recently, a young man was bitten in the hand by a woman who had fallen in an epileptic fit. Three days afterwards he died, and the neighborhood became greatly excited over the occurrence.

This case only tends to add additional testimony to the fact that the public love sensations.

This death may have been merely a coincidence, or again, a bite from any person or any animal will occasionally, or we should rather say, *might* occasionally, set up a degree of inflammation in an already depraved or weakened constitution, that might prove fatal.

But to suppose that the bite of an epileptic is any more serious, simply because it is inflicted by an epileptic, than would be a similar wound received from any other person, is certainly unreasonable and not to be entertained in the pathological light of to-day.

NOTES AND COMMENTS.

Exercise in the Treatment of Non-United Fractures.

These cases of non-union will oftentimes prove exceedingly annoying, hence the expedient which has proved entirely successful in the hands of Dr. G. W. Nesbitt (*Jour. Am. Med. Ass.*, January 12, 1884,) is worthy of trial.

"July 25, having first applied a close-fitting elastic stocking to the limb, as far up as six inches above the knee, I then made extension, till the fragments were brought as nearly as possible into apposition, and applied broad strips of a firm woollen blanket lengthwise of the thigh, and extending below the knee, and above the trochanter major and the tuberosity of the ischium. These strips completely surrounded the thigh, and were held in place by a roller bandage of the same material, applied firmly from the condyles of the femur to the perineum and the tuberosity of the ischium. I next applied a roller of mosquito-net, then a coat of plaster-of-Paris; and while it was yet soft, I applied strips of wire gauze, extending the whole length of the thigh, and outside of this another covering of the mosquito net, which was again coated with plaster, wire gauze, and more netting, till a splint was formed at least half an inch in thickness, and extending the entire length of the thigh. I now reflected the ends of

the longitudinal strips of blanket stuff, which was first applied to the thigh, back over the outside of the splint, and secured it by a roller bandage of the mosquito net, extending from within half an inch of the lower border of the splint to within half an inch of its upper margin, and over this applied a thin coat of plaster, which in turn was covered by a muslin roller bandage, which gave it a finished appearance and completed the dressing.

"The cushion-like margins of the splint above and below, formed by the reflection of the lining of the splint, as it were, were not only neat, but comfortable and firm, while the whole splint fitted so closely from the perineum and tuberosity of the ischium above to the condyles of the femur below as to render shortening almost impossible after the plaster became hardened.

"Extension was kept up until the splint became firmly set, when the patient was allowed to get up and go about, bearing his weight upon the broken leg without the aid of canes or crutches, except when taking a long walk—as coming down town, a distance of nearly a mile—when he used one crutch, and sometimes a cane and a crutch. But he worked about home, sawing wood and doing chores about the house, without any artificial support most of the time.

"The first few days he complained of some soreness at the point of fracture, but not sufficient to discourage him in his efforts at independent locomotion.

"He was now really self-sustaining, and I left him to take care of himself till October 6, when I removed the plaster dressing, and found that a firm bony union had taken place, with the limb in good shape, and with less than three-fourths of an inch shortening. The man has since that time been employed as a house carpenter, also in putting up wind-mills. He walks without limping, does all kinds of heavy work, and climbs a ladder with as much agility as if nothing had ever happened him."

Nasal Stenosis a Cause of Nasal Catarrh.

We have already had occasion to refer to nasal stenosis as an etiological factor in nasal catarrh, and we are pleased to see that Dr. W. J. Walsham (*Lancet*, December 29, 1883,) adds his experience to the affirmative side. He says:

"Nasal stenosis as a cause of chronic nasal catarrh does not appear to have received the attention that it undoubtedly merits, and I believe it is not unfrequently overlooked. Many of the cases of so-called intractable nasal catarrh, strum-

ous rhinitis, etc., I cannot but think depend, if not for their cause, at least for their continuance, upon some of the various forms of obstruction of the nasal cavities. During the last few years I have had under observation many such cases, and have found that after long periods of unsuccessful treatment, both local and constitutional, the symptoms have readily yielded on removing the source of obstruction.

"With regard to treatment, when the catarrh depends upon one of the forms of stenosis, it is, in my experience, useless to attempt to cure the disease without first removing the obstruction. In the case of a deflected septum this may usually be accomplished by forcible straightening, aided, if need be, by a stellar or other division of the cartilage.

"On the question of the treatment of general hypertrophy of the mucous membrane, it is not my intention to enter here. Posterior hypertrophy of the inferior turbinated bone may be removed by including the hypertrophied portion in the loop of a wire snare (that invented by Dr. Jarvis appears to answer very well), and slowly dividing the tissues included in the loop. General hypertrophy of the inferior or middle turbinated bone is best remedied by removing the whole bone, an operation attended with, as far as I have seen, neither danger nor inconvenience of any kind. The removal has been readily accomplished by means of a polypus forceps.

"Hypertrophy of the anterior end of the inferior turbinated bone may be removed by a wire snare, the parts having previously been transfixed with harelip pins. In one instance I succeeded in reducing the hypertrophy by means of frequent application of solid nitrate of silver. As a rule, however, the more radical method of procedure will, I think, be found necessary."

The Cold Douche in Maniacal Delirium.

When we remember that opiates sometimes prove very dangerous in this condition, it will be well received when we meet with safer therapeutic recommendations. Dr. Thomas Barlow (*Lancet*, January 5, 1884,) had very satisfactory results in a case of delirium tremens, from the cold douche:

"The patient was stripped, and a spongeful of cold water squeezed down his neck and back, and then freely splashed over his face and chest. It quieted him immediately. He said it was nice, and he was well pleased to have it repeated. He was then vigorously rubbed and dried, and some strong broth was given to him, which he thoroughly enjoyed. During the rubbing process he gave

one short, loose cough. The bed was soon made; there was not the slightest difficulty in getting the patient to lie down and close his eyes, and presently he dropped into a quiet sleep. We left his friends with the instruction that if he became violent again the same treatment was to be repeated, and that he was to have no physic, but only some egg and milk or broth whenever he should awake. His wife was also told by way of precaution that it was by no means infrequent in such cases (even when not treated by cold douche) to get pneumonia, and that therefore this was one of the things for which to be prepared. The patient slept quietly for four hours, then woke and was violent again. He was doused by the friends in the same way as before, and once more lay down and slept quietly. He had no delirium after this."

He subsequently had pneumonia, but recovered. Dr. B. attributes the good effects of the cold douche to nervous shock.

A Caution in Urinary Examinations.

As evidencing the necessity of great caution, and generally of more than one examination of the urine, before forming a positive opinion, the following case may be quoted from *Berlin. Klin. Woch.*:

Professor von Heusinger, in a recent session of the Aertzl. Verein in Marburg, declared that a certain individual desired to be examined in view of having his life insured. At the close of the physical examination, he was requested to urinate. As he had micturated before entering the doctor's office, he now could pass but a slight amount. The chemical examination gave a yellowish-green precipitate (saccharine). At the examiner's request, the man returned the next morning, and the urinary test presented a negative result. It turned out after a close questioning that the individual had suffered for months with gonorrhœa, and had used injections of sulphate of zinc. He had passed water and used this injection just previous to presenting himself for the first examination. Dr. Fettiën, who was then consulted, found that if a solution of sulphate of copper is added to one of sulphate of zinc and tartaric acid and caustic soda in excess, a blue fluid is formed, which contains, besides the constituents of Fehling's solution, sulphate of zinc. Added to boiling urine, the zinc is precipitated as a hydrate with a greyish-green color, and the solution turns from blue to yellow. If albumen is added, the same phenomena are observed, only the fluid above the precipitated zinc is reddish.

Pilocarpine in Scarlet Fever.

Although the majority of new drugs that are being daily offered to the profession, are very soon proven to be worthless, we occasionally receive some really valuable addition to our therapeutic resources, and among them, pilocarpine holds a high place. In the *Glasgow Med. Jour.* for January, 1884, Dr. Frank Shearer reports a case of scarlet fever, followed by coma and convulsions, treated successfully with pilocarpine, in doses of one-thirteenth of a grain, hypodermically, and he says:

"Therapeutically considered, it is very interesting to find that when venesection to a very fair amount had failed, the pilocarpine first showed its marked physiological effects, and then stopped the fits, and that after such a lapse of time as quite to put it beyond all reasonable doubt that the venesection had very little to do with the successful result. Indirectly, perhaps, it aided it, as did also the application of the hot pack, which was kept up very industriously; yet both of these methods of treatment were in operation for upwards of one hour and a half without in the least modifying the fits.

"The case is one of those which cheers the physician on his way, and bids him hope and act, however hopeless and desperate the conditions with which he has to contend may be."

Inhalations of Oxygen.

As a means of stimulating retarded tissue metamorphosis, inhalations of oxygen promise much. The *Deutsche Med. Wochensch.*, of October 10, contains the substance of a lecture given by Dr. Kirnberger in the Medical Society at Mayence, on the treatment of leukæmia and pseudo-leukæmia, in which he suggests the inhalation of oxygen as a means of obviating the retarded tissue-metamorphosis which is characteristic of this disease. He cites a case in which he employed this treatment with good results—the patient, a boy aged 10½, who had been treated with iron, arsenic, and quinine, without any benefit, improving greatly and finally becoming cured after the inhalation of oxygen, combined with arsenic internally. The boy had reached a condition of extreme weakness, being entirely confined to bed, with loss of appetite and tendency to vomiting; the spleen considerably enlarged, and the white and red blood-corpuses in the proportion of 1 to 90. The treatment began in December, 1882, and after a daily inhalation of about 30 litres, the boy could leave his bed in ten days, and could go to school about the end of February. Some variations in

his condition occurred from time to time; but about the middle of September the author considered him to be definitely cured, the number of red corpuscles having returned to the normal.

Treatment of Varicose Veins.

This neat and simple operation is described in a contemporary by Mr. Folker, who has found it very satisfactory. A small incision was made on each side of the vein; and a curved needle, passing in at one incision and out at the other, carried the ligature under the vein, and was withdrawn. A flat instrument was now, in the same manner, passed in at one and out at the other incision, and threaded with one end of the ligature, which then, by its withdrawal, passed the ligature over the vein. The two ends of the ligature, which now surrounded the vein, projected through one opening. This was repeated in as many places as might require it, and then the lowest one was tied first, and the ligature cut off close; firm pressure was made over it just to press out any drop of blood that might be present, and the little opening was closed with collodion. Each ligature, from below upwards, was tied in a similar way, pressing the blood out of the vein up to each ligature before tying it. The ligature used in the present case was pure silk, well carbolized; but Mr. Folker hoped to tie some with tendon-ligatures, which would become thoroughly absorbed sooner than the silk.

More About Jequirity.

Dr. Hotz thus sums up his experience of 65 cases in the *Chicago Med. Jour. and Ex.*, February 1884:

1. Jequirity is the best known remedy for chronic granular conjunctivitis.

2. It is the most effective remedy for the clearing of trachomatous pannus, and in inveterate forms of pannus it is preferable to peritomy, as well as to the inoculation of blenorrhœal virus, because it does its work quicker than the operation, and safer than the inoculation.

3. It has no injurious effect upon the eye, and can be used with perfect safety even when the cornea is ulcerated.

4. But it should not be used while the cornea and conjunctiva are acutely inflamed.

5. It does not benefit those cases of chronic conjunctivitis in which the symptoms of catarrh (increased secretion, succulence of the retro-tarsal folds, etc.,) predominate over those of trachoma (enlarged papillæ, and lymph follicles, plastic infiltration of tarsal conjunctiva).

6. The most violent attacks of jequirity ophthalmia accomplish the speediest cures of granulated eyelids, and the quickest clearing up of the vascular cornea.

Unsuspected Albuminuria.

We have taken occasion recently to refer to this subject, and our remarks receive additional import from the following case reported by Dr. McKew in the *Maryland Med. Jour.*, January 12, 1884:

A boy, æt. 15, presented himself suffering with severe headache; he was otherwise apparently perfectly well. Examination of the urine revealed exceedingly delicate traces of albumen, amounting to merely a slight opalescence. The microscope revealed casts. A cautious opinion was given. The disease has advanced rapidly, until now the patient is dying of bronchial effusion. There is no assignable cause for the albuminuria in this case. At 3 the patient had scarlet fever, and one and a half years ago he had typhoid fever. He has had nystagmus for some years. The urine now contains fifty per cent. of albumen. The case teaches the importance of examining the urine whenever the cause of disease cannot elsewhere be found.

Conservative Treatment of Compound Fractures.

By resection of the injured ends of the bones and wiring together of the fragments very good results have been obtained in cases where amputation would have been formerly considered to be indicated. For instance, in the *Brit. Med. Jour.*, January 5, 1884, Mr. Wright relates a case of resection of the humerus and wiring in a recent compound fracture. There was a large lacerated wound nearly severing the arm, but leaving the skin, vessels, and nerves on the inner side intact. The periosteum was torn off a part of the humerus, the forearm was also fractured. The base-ends of the humerus were removed, and two silver sutures inserted. Good union and a nearly perfect limb resulted.

Eucalyptus in Pulmonary Gangrene.

Extreme fœtidity of breath, cough, dyspnoea, and fever, with dullness in a definite location, tubular respiration and crepitant râles, and black and very offensive sputa, caused Dr. Bonamy (*Le Courier Med.*,) to diagnose pulmonary gangrene. The patient was first put upon a mixture containing carbolic acid, but no improvement following, this was replaced by tincture of eucalyptus. In

two days after the last prescription, the odor of the breath was much less offensive, and in less than two weeks the patient was cured.

Death from Gluttony.

Two cases are reported in an exchange. The first is that of a railway clerk, who appeared well when he went to bed on Christmas night, but died before morning. The medical man who examined the body found the stomach largely distended with undigested food, which had stopped the action of the heart. The other case was that of a negro from Sierra Leone, in whose stomach whole potatoes were found.

CORRESPONDENCE.

Duty of Professional Secrecy.

EDS. MED. AND SURG. REPORTER:—

I take the following extract from my note book: "March 21, 1882. This afternoon a man came into my office, and, after asking me if I were a surgeon and for a private interview, told me that he wanted to get three bullets extracted, one from his arm, one from his leg, and one from his back."

The manner and conversation of this man left no reasonable doubt in my mind that he was a rogue trying to escape from the penalty of violated law. He left my office, and I heard no more of him from that day to this.

I give these few points in the above case in order to ask my professional brethren what is the duty of a physician in this case, or such cases, to the public. Is the physician under obligation of secrecy to his patient, or is he under obligation to the public to catch, or help catch, the rogue? How far will his obligation of secrecy protect him from being charged with being a party to the crime? Will a patient's non-payment of fees release a physician from his obligation of secrecy?

H. NYE, M. D.

Enon Valley, Pa., Feb. 11, 1884.

[1] We would suggest that the non-payment of a fee does not release the physician. Two wrongs do not make one right. (2) His obligations to society are such that a physician should render all the aid possible in bringing a criminal to justice, but he should not act on mere suspicion. He should have ample and solid grounds for action before his professional obligations to secrecy are excused.—EDS. REPORTER.]

The Ethics of Consultations.

EDS. MED. AND SURG. REPORTER:—

So much has been said within the last two years in regard to ethics and consultations that it would seem that all the points in controversy ought to have been settled; but nothing that I have read covers the case I have in view, and what I state is with the object to receive information.

To illustrate my point: Last summer, in a conversation with Prof. R——, of Hamilton, Ohio, he said: "I would like to meet my competitor,

Prof. W—— (who is a homœopath) in consultation; he is a worthy gentleman and a skillful physician; but it would not be consistent in me as a teacher in the regular school, and as a member of the medical societies representing progressive medicine."

I thought to myself, Prof. R—— has a higher aim than the consideration of dollars and cents.

Now the opposite of Prof. R—— is Dr. V——, of this county, who is regarded as the leading surgeon of this section, and a member of the State Medical Society, who counsels with a "physio-medical" doctor upon all occasions. The physio-medical *genus* is a rare specimen of the *genus homo*, and perhaps you do not know him by personal contact in the East, as he is *indigenous* to the country west of the Ohio river.

Now, how can a doctor be a member of the "State Medical Society" and consult with a doctor of the above class? Information respectfully solicited.

B. P. ZELLER, M. D.

Brock, Ohio, January 2, 1884.

[We confess to some uncertainty as to what a "physio-medical doctor" may be, but we do acknowledge to a clear conviction that neither the profession nor the public can gain by consultations with men who practice medicine under the avowed influence of prejudice and dogma, who reject well-established means of diagnosis, who deny the utility of pathology, and who discard well-tried remedies merely because they are "mineral" or "poisonous." It is a mere sham to pretend to consult with such men.—EDS. REPORTER.]

A Criticism Corrected.

EDS. MED. AND SURG. REPORTER:—

I have no desire to enter into a controversy with Dr. Guild concerning the case reported by me for your magazine some weeks ago. His communication, however, contains so much that is unfair and *misapropos* that I cannot, in justice to the gentleman who attended Dr. A., or myself, allow the criticism to go unquestioned.

Dr. G. has evidently been laboring under the impression that I attended the case; this is a mistake, as a more careful reading of the article would have shown. I state distinctly that "I am indebted to the attending physician, Dr. J. J. Ward, for the notes," and so far as the death certificate was concerned, instead of "demurring," as Dr. G. says he did, he made it out "apoplexy" himself. Whether this was correct or not, I am sure I cannot say, but it seems to me, that to have headed the article "A Case of Possible Apoplectic Coma" would have been just as nearly incorrect—if I was incorrect—as the other. I have never known before that "errors in diagnosis" could be committed where no diagnosis was made. There certainly was no conclusion arrived at in the article. The word "possible" is used in the heading. In one place I say, "a satisfactory diagnosis was not made;" in another, "we confess that the complexus of symptoms here present puzzle us," and finally, that "we are inclined toward the diagnosis of death from heart failure, caused by chloric ether." I submit, that though here and throughout the whole article there is plenty of room for difference of opinion, yet I can hardly be accused

of "errors in diagnosis." Why the allusion to "heart failure" was made is briefly this: Chloroform by the mouth produces, according to Bartholow, "stupor and insensibility," it also increases the "action of the arterial system." Now, if "over stimulation produces exhaustion," why is it so extremely unreasonable to suppose that the poison produced the coma and other symptoms referable to the nervous system, and that when he had partially recovered from its effects, sudden exertion, sitting up in bed, vomiting, etc., produced failure of an organ not as strong as it once was and now weakened still more by over-stimulation? Far be it from me to aver with any degree of certainty that such was the case. I have learned, however, to be very cautious about using the word "never" in matters pertaining to medicine.

In regard to therapeutics, I have but to say that when Dr. Guild will point out the passage wherein it is stated that alcoholics were administered, I will discuss with him the advisability of so doing. It is indeed stated that stimulants were "pushed," and so indeed they were, as much as it was possible under the circumstances; but the "stimulants" were carbonate of ammonia and digitalis. It is of course not to be supposed that Dr. Guild knew this, but he certainly knew that there were other stimulants beside alcoholics, and that no mention of the latter is made in the article which he criticised. And I may here say that not only in this connection has he misrepresented me, but he does likewise in his brief epitome of the case at the beginning of his article. Any physician who will take the trouble to read my communication carefully, cannot fail to be impressed with these two facts, and such will see the injustice of Dr. G.'s arraignment.

I close here by expressing the hope that any physician who has had opportunities for examining any cases such as the late Dr. A.'s was, will publish his conclusions. S. M. WARD, M. D.

Ellenville, N. Y.

Metrical Anatomy of the Eyes and Orbits.

EDS. MED. AND SURG. REPORTER :—

The depth of the orbits from the supra-orbital foramen to the optic foramen is 5 centimeters, and the lateral diameters at base 4 centimeters. The supra-orbital foramen is 4 centimeters from the outer part of the sphenoid fissure, and from the margin of the orbits (externally) to the nearest point of the sphenoid fissure is 32 mm., this being the nearest distance to the brain. From margin of orbits (at lachrymal canal) to the optical foramen is 45 mm. From outer and lower margin of the orbits to the nearest point of sphenomaxillary fissure is 15 to 18 mm. 4 or 5 mm. below the margin of the orbits is the infra-orbital foramen. The depth of this canal is 17 mm. The anterior ethmoid foramen is 33 mm., and the post ethmoid foramen 39 mm., within the margin of the orbits, measuring from the lachrymal canal. The lachrymal canal is 2 to 3 mm. within margin of the orbits, and is 4 mm. in diameter. The nasal duct "is $\frac{3}{4}$ inch" in length. The diameter of the optic foramen is 3 to 4 mm. About 3 mm. "external to the lachrymal canal at inner and forepart of orbital surface of maxillary bone is the depression for attachment of inferior, oblique, and lachrymal tubercle." The tendo oculi two lines in length and

one in breadth, is attached to the maxillary bone 5 mm. above the lachrymal canal. The pulley of superior oblique is 13 mm. above the lachrymal canal; arising "about a line above the inner margin of the optic foramen," it is inserted into the sclerotic midway between the cornea and entrance of the optic nerve. The tensor tarsi is 3 lines in breadth and 6 in length. The recti muscles are inserted into the sclerotic, 3 lines from the margin of the cornea. The diameter of the pupil varies from 1 to 8 mm., according to its dilatation or contraction.

* * * * *

A knowledge of the depth and metric relations of the orbits is useful to the surgeon in performance of the operation of enucleation of the eyeball, and probing, etc. No instrument should be introduced beyond 32 mm. from the outer margin of the orbits, nor in no case should they go beyond 45 mm. The lachrymal tubercle serves as a guide to the surgeon in the operation for fistula lachrymalis—a knowledge of the size of this canal is useful in applying instruments to it. If a vertical line is drawn across the base of the orbit, the degree of divergence or convergence of the pupil can be metrically expressed.

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JOHN M. WHITE, M. D.

Pleasant Ridge, Ala.

NEWS AND MISCELLANY.

Ohio State Sanitary Association.

The first annual convention of the Ohio State Sanitary Association met at Columbus on the morning of the 14th inst. Dr. William M. Beach, of London, was unanimously elected temporary chairman, and accepted with a short speech. The high waters detained many, but before evening adjournment the room was comfortably filled with physicians and scientific men from all over the State.

Rev. Dr. W. E. Moore of Second Presbyterian Church prayed, and Dr. R. Harvey Reed, of Mansfield, was chosen temporary secretary.

Dr. C. M. Finch, President of the Board of Education of Portsmouth, who was to plead for a State Board of Health, was not present—probably detained by the floods.

In accordance with arrangements, Dr. Baldwin delivered an address of welcome, in which he referred to the sad effects of the sewerage system of this State upon the public health, and set forth a number of important topics which he deemed of importance, and which he thought should receive the attention of the student of sanitary science.

The response to Dr. Baldwin's address was made by Mr. John Simpson, Ph. D., superintendent of the Mansfield public schools. He advocated a more thorough and general education in sanitary science, believing that a more wide-spread knowledge of hygiene would have a wholesome effect on the public health, and would prevent many of the common abuses. "Were a sound body the rule instead of the exception," he said, "the condition of the race would be materially improved in this age of stupendous progress."

The Chair, at the close of the address, ap-

pointed the following committee on permanent organization: Drs. J. F. Baldwin, Columbus; X. C. Scott, Cleveland; E. H. Hyatt, Delaware; G. S. Franklin, Chillicothe; C. A. Lee Reed, Hamilton.

Dr. Beach, of London, the temporary chairman, read an interesting paper on the "Importance of Sanitation." The production displayed a very intimate acquaintance with the history of sanitary science. It reviewed at considerable length the history of the plagues that swept over Europe during the middle ages, giving a general idea of their severity, and some of the mediums by which pestilence is spread. Dr. Beach is not in favor of fumigating bedding and other clothes after the poison of pestilence has once been retained in them, but thinks that the physician should enforce positive sanitary precautions by having the articles burned. The history of the custom of quarantining against the epidemics of cholera and yellow fever was run over, and the doctor expressed himself as in favor of it. The paper closed with an eloquent peroration.

A letter was read from Dr. James E. Reeves, of Wheeling, secretary of the West Virginia Board of Health, who was expected to address the present convention, cancelling the engagement, as he was needed at home to help take care of the people rendered destitute by the flood.

Dr. G. S. Franklin, of Chillicothe, read a voluntary paper on the effect of slaughter-houses upon public health, in which he expressed himself as in favor of placing the control of all such institutions in the hands of boards of health.

The association then adjourned until 2.30 p. m.

The first thing on the programme for the afternoon was a paper on "Drainage and Water Supply," by Professor E. H. Hyatt, M. D., of Delaware. Dr. Hyatt, however, said that he would willingly give his time to the discussion of the Scott bill, and the Society accepted the offer. Dr. Scott, of Cleveland, the champion of the bill, then took the floor and explained what the bill was intended to do.

The Association spent the greater part of the afternoon discussing this Board of Health bill, the following gentlemen participating in the discussion: Professor E. H. Hyatt, of Delaware; Dr. Conklin, of Dayton; Dr. McCurdy, of Mahoning county; Dr. Reed, of Hamilton; Dr. Baldwin, of Columbus; Dr. Silver, of Sidney; Dr. Reed, of Mansfield; Dr. Beardsley, of Ottawa; Dr. Beckwith, of Cleveland; Dr. H. J. Sharpe, of London, and Dr. Franklin, of Chillicothe. All who spoke were strongly in favor of the tenor of the bill, and nothing more than suggestions as to how it might be improved were made. The question was raised whether it would not be better to create two boards, a board of examination and a board of health, instead of vesting the two powers in one body, as the bill contemplates. Dr. Baldwin thought one board would be sufficient. Too many boards was not a thing to be desired. Dr. Reed, of Mansfield, brought up the question of signing the certificates. He wished to know if the certificates of new-school men would only be signed by the new-school members of the board. There was considerable talk over this subject, and the matter was finally settled by Dr. Scott stating that it was the intention of the bill to require the signatures of the President and Secretary of the Board to the certificates.

The following committee was appointed to confer last evening in regard to the proposed amendments: Dr. Scott, Dr. W. J. Conklin, of Dayton; Dr. Beckwith, of Cleveland; Dr. Beardsley, of Ottawa; Dr. Baldwin, of Columbus; Dr. Beach, of London; Dr. Franklin, of Chillicothe; Dr. Jones, of London; and James Alison, of Cincinnati.

The regular programme was then taken up, and Dr. John McCurdy, of Youngstown, read a paper on "Sewerage and Water Supply of Youngstown." The Youngstown people use the Holly water system and main trunk sewers.

Mr. James Alison, a delegate from the Master Plumbers' Association of Cincinnati, read a voluntary paper on "The Plumber in his Relation to Sanitary Progress, as Viewed from the College of Practice." The paper was one of the best of the meeting.

Professor Hyatt's paper on "Drainage and Water Supply," and Professor Conklin's paper on "Sanitation in Schools," will be read this morning.

The convention, after hearing Mr. Alison's paper, adjourned until evening.

The evening session was held in the House of Representatives, commencing at eight o'clock. There were about one hundred persons present, among them being a number of members of the General Assembly.

Dr. Beach took occasion to return thanks for use of the hall, and called for the first paper of the evening, the opening by Dr. Starling Loving of discussion on the resolution, "That Legalized State Sanitation has Become a Necessity in the State of Ohio, for the General Protection of Its Citizens." He held that thousands of deaths occur annually in Ohio from preventable diseases, and referred to the Secretary of State's report to substantiate his statements. These deaths, he argued, were a direct loss of many millions of dollars to the State, and some legislative action should be taken to prevent them. He favored the appointment of a board of competent physicians to examine all medical college students; and also a State board to take charge of sanitary affairs.

Discussion of Dr. Loving's paper was opened, and Dr. John McCurdy, of Youngstown, and Dr. Reed, of Mansfield, took part.

Professor W. J. Conklin read a paper on the "Influence of Public Schools on Brain-building," which did not elicit discussion, from the fact that his statements coincided with the views of most members present.

The convention then adjourned till next morning.

At the morning session, the first order of business was the report of the committee on permanent organization, who reported the following:

President—Wm. Morrow Beach, M. D., London, O.

First Vice-President—Prof. Edward Orton, Columbus.

Second Vice-President—Professor Nelson, Delaware, O.

Third Vice-President—Hon. L. D. Brown, Hamilton, O.

Secretary—R. Harvey Reed, M. D., Mansfield, O.

Treasurer—Prof. John Simpson, Mansfield.

Executive Committee—Prof. Starling Loving, M. D., Columbus; H. D. Beckwith, M. D., Cleveland; W. J. Conklin, M. D., Dayton; E. H. Hyatt, M. D., Delaware.

Committee on Admissions—C. E. Beardsley, M. D., Ottawa; John McCurdy, M. D., Youngstown; and D. R. Silver, M. D., Sidney.

Committee on Publication—Drs. R. H. Reed, J. T. Baldwin, and Geo. A. Collamore.

Committee on Legislation—Drs. Wm. M. Beach (*ex officio*); X. C. Scott, Cleveland; C. S. Van Pelt, Toledo; T. C. Minor, Cincinnati; J. R. Flowers, Columbus; and C. M. Finch, Portsmouth.

The report was adopted.

The committee on constitution also made a report. They had prepared a constitution, which was read and adopted. The name of the organization is to be the Ohio State Sanitary Association, and the object of the Association is the general advancement of sanitary science, and the encouragement and promotion of local organizations throughout the State. The membership will be of two kinds, active and honorary. Active members shall form the body of the association, and shall be selected with special reference to their interest in sanitary studies and allied sciences. Honorary members shall be selected with reference to their general interest only in the work in hand. The association will meet at least once a year, in the month of February, and unless some other city is mentioned, will meet in Columbus.

Professor Curtis C. Howard, Professor of Chemistry in the Starling Medical College, read a paper on Impurities and Adulterations of Milk, the result of a series of examinations of the milk of the Columbus market. The professor thought there was little adulteration in the way people generally suppose. As for chalk, it is insoluble, and if mixed in clear water, it will be turbid for a time, but after standing a while all the chalk will settle and the water will be clear again; so, also, with brain matter, which some claim to have found in milk. It could not be put in without spoiling the whole of the milk. Water, however, may be added *ad infinitum*, and the quality of the milk will be in inverse proportion to the amount of water used. The professor exhibited a chart, which showed the results of his work.

The next paper was read by Dr. D. N. Kinsman, of Columbus, on "Some Reasons for the Establishment of a Board of Health." He called attention to the amount of disease arising out of ignorance of the causes of disease. Every section of country has its particular industry, and each industry has its own peculiar diseases. How to prevent them should be the work of the Board. He referred to the importance of obtaining accurate vitality statistics, and thought a good Board could do this work in a way not done as yet.

Dr. S. H. Smith, of Warren, who was on the programme for a paper on "Diphtheria," and Dr. J. W. Craig, of Mansfield, for a paper on "Tobacco from a Sanitary Point of View," were absent.

On motion, a paper on "The New Fashion," by Dr. C. A. Lee Reed, of Hamilton, was read. It referred to the absence of athletic sports among the people in general, and hailed what seems to be the approach of an era when the pell-mell, hurry-skurry of American business life, will be

broken into a fair amount of refreshment and rest.

Dr. Lew Shusser, of Canton, read an essay on "Vital Statistics," a paper illustrating the great need of correct vitality statistics.

The remaining part of the morning session was taken by Dr. Beckwith, of Cleveland, who read a paper on "Sewers and Sewer Gas."

Adjourned till afternoon.

At the afternoon session, F. H. Darby, of Morrow, who was on the programme to read a paper, not being present, and sending his regrets along with his manuscript, the paper was read by the Secretary. The subject of the essay was "Blood Poisoning."

The only other paper on the programme, that of Prof. Edward Orton on "What shall be done with our Sewage and Garbage," was, at the urgent request of the writer, who had been prevented by illness from completing his paper, held over until next year. The professor made some very befitting general remarks, however, on the general subject of sanitation.

After a short and enthusiastic address by the President, Dr. Beach, the Association adjourned to meet in Columbus next February.

WM. MORROW BEACH, M. D., *Pres.*,
London, O.

R. HARVEY REED, M. D., *Sec'y.*,
Mansfield, O.

Correction.

Dr. Hiram Corson writes us: "On page 15 of the pamphlet containing 'Proceedings of the Alumni Society of the Medical Department of the University of Pennsylvania,' there is an error which I should like to have corrected through your REPORTER. The cost of Morris Plains Hospital is there given as \$800,000, instead of \$2,800,000, as it should be."

OBITUARY NOTICES.

D. L. ALLEN, M. D.,

Of Shenandoah, Iowa, died at Princeton, Kansas, of consumption, January 24, 1884, aged 36 years, 8 months, and 6 days.

Dr. Allen graduated in the class of '74 at Long Island Medical College. He commenced the practice of medicine the same year at Academia, Pa.; continued there till the fall of '81, when his rapidly failing health warned him to seek another climate, when he located in Iowa, and for a short time seemed to improve, till another attack of pneumonia left his lungs so much weakened that he never regained his strength. Change of climate and medicine made no change in him.

He was a physician of rare judgment, and a surgeon of accurate skill, a friend to the poor, and a Christian gentleman. He leaves a wife and one child.

DR. FRANK O. NAGLE.

Dr. Frank O. Nagle died at his residence, No. 2004 Germantown avenue, this city, February 1, in his twenty-seventh year, from a complication of diseases, resulting from typhoid fever. At the time of his death he was Professor of Therapeutics and Materia Medica in the Medico-Chirurgical College. Dr. Nagle graduated at the University

of Pennsylvania in 1879 with honor, receiving the Hodge gold medal, and afterwards was on the medical staff of the Philadelphia Hospital. He was a member of the County Medical Society and Philadelphia Chemical Association, and contributed several articles to this journal.

Items.

—Alcohol will be found effectual in removing ice from show-windows.

—Prof. Bartholow says that thymol is the best agent to destroy the odor of iodoform.

—Prof. Da Costa recommends chloral hydrate, in three-grain doses *ter die*, for infantile incontinence of urine.

—Professor Virchow has come out in favor of American pork. He declares that there is no danger in it, and that the shutting it out from Germany is a political, not a sanitary measure.

—Artificial oysters are supplied to the Paris markets, according to a *feuilletoniste* of the "Union Médicale." They are colored by means of copper, and are cemented to the interior of old shells.

—Fenoglio recommends the injection of ergot in cases of splenic enlargement due to malaria. He recommends Bonjean's ergotin, dissolved in hot water, injected before the midday meal, while the stomach is empty.

—Dr. S. W. Gross recently performed the first stage of the operation of gastrostomy on a woman aged fifty-one, suffering from carcinoma of the œsophagus. On the eighth day the woman's temperature and pulse were normal, and the case was progressing most favorably.

—The Secretary of the Treasury has approved the recommendation of Surgeon General Hamilton, that an immediate inspection be made of the cities bordering on the Gulf of Mexico and the Caribbean Sea, having commerce with the United States, in order that their actual sanitary condition may be known in advance of the yellow fever season.

—The London *Saturday Review*, in an article on "the silly and ignorant agitation against vaccination," says, justly, that "people who do not choose to have vaccination performed on themselves or their children are as much guilty of spreading disease as if they turned poisonous matter into a reservoir of drinking water, and deserve no more quarter."

—A libel suit having been brought by a member of the medical faculty of the University of Michigan against a newspaper that had charged him with criminal relations with a lady who was his patient, \$20,000 damages were awarded by the jury, and, the case having been appealed, the Supreme Court has affirmed the judgment.

QUERIES AND REPLIES.

Gynæcological Queries.

EDS. MED. AND SURG. REP.—

1. Will some reader kindly give me some hints for treatment of the following case: Multipara, aged twenty-six years, for some years past has had almost complete menstrual suppression. Periods occur but once or twice a year. Is subject to sick headache and backache; is anæmic, and

has very little appetite; more or less leucorrhœa. Examination per speculum reveals a slightly enlarged uterus and cervix, also a slight degree of retroversion. The os presents the so-called ulcerations. She has been treated by all the physicians in her vicinity, and has taken every form of emmenagogue and tonic without the slightest benefit. Her only living child is five years old, and since his birth her trouble is greatly aggravated, though it has existed to some degree for eight years. Prior to that time, she menstruated normally; but on one occasion, in attempting to hold in a team of runaway horses, she so strained herself that a very alarming uterine hemorrhage resulted. From that event dates her trouble. Marriage and pregnancy produced no change.

If any of your readers can suggest a course of treatment liable to result in benefit, I shall be very grateful.

2. I would be glad to receive information as to some method of applying astringent remedies to the vagina without using injections. My patients so frequently complain of the latter mode of treatment as being so inconvenient, painful, or consuming so much time, that I am constrained to seek some form of medication more easily applied.

MEDICA.

Use of Alcohol.

EDS. MED. AND SURG. REP.—

I have received a number of answers to my request on "Alcohol, Its Use and Abuse as a Medicine," published in the MEDICAL AND SURGICAL REPORTER, issue of February 2, 1884, page 159. I would like to have a much larger expression of the views of the profession on this subject, and therefore ask every one who reads this to be kind enough to briefly state their views and send them to me at their earliest convenience. Don't wait for some one else, thinking your views are not wanted, but send me your views, as I am very anxious to have them. Fraternally,

JOHN B. CARRELL.

Fowler's Solution.

Query.—Does Fowler's solution of arsenic deteriorate by age? Does it ever become worthless by long keeping? If it loses its strength by age, what is the chemical process of its so doing? Yours truly, D. N. P.

Mangum, N. C.

We have referred this query to one of our ablest chemical pharmacists, who replies as follows:

"Fowler's solution, with ordinary care, cannot become worthless by long keeping, and it is a question whether the article deteriorates from any such cause. If, however, a change should take place, it would be owing to the alteration of the arsenite (so-called) into arseniate of potassa. The dose and therapeutic value of the latter would be about the same as the former. If any deposit should occur, it would be probably the coloring matter from the compound tincture of lavender contained in the preparation.

"In pharmaceutical preparations of this kind, it is not well, however, to keep them on hand too long.

"Injurious or not, the long keeping of them puts the dispenser, to say the least, in an uncomfortable position. I usually prepare Fowler's solution in about one-half pint quantities, which will be used in about three or four weeks. This insures a fresh preparation, and me more satisfaction, though I may know the preparation would be equally as good if a year or more old. I am yours,

"L. E. SAYRE, PH. D."

Dr. J. R. asks: Can a graduate of a standard medical college practice in the State of Illinois without an examination?

Ans.—Yes.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

MILK, GOOD AND BAD.

BY SAMUEL PETERS, M. D.,
Cohoes, N. Y.

The agitation that has been going on for years past in our large cities in reference to this subject has resulted in a full decision of the fact that there is good milk and bad milk; that good milk is sadly the exception in cities of any size, and bad milk the rule; that good milk is nature's own perfect combination of all the nutrient principles required for our nourishment, and suitable for all ages and almost all conditions, whereas bad milk is deleterious to persons of any age, especially and particularly to tender infants and young children, causing and keeping up such an indigestion and stomach disease as to produce our most dreaded diseases, such as cholera infantum, diarrhoea, dysentery, marasmus, fevers, restlessness, etc. So constantly has this been demonstrated and proved over and over to be the truth, that careful physicians are always afraid of it in the cities, whereas they are hearty and free in recommending it in the country. In the latter place, where it is pure, they find it not only admissible, but absolutely desirable, in any case where the body needs active support; and in infants where the natural food, the mother's milk, is unhealthy, insufficient in quantity, or altogether wanting, infants are feeble and pale in the cities as a general rule, plump and hale in the country. A large percentage die in the cities; a very small proportion in the country. In the places where the milk has been rendered impure

and unfit for use, the physician finds his remedies only partially successful, where they should and would be speedily so, owing to the fact that the principal, or certainly one of the active causes remains, namely, improper food. One hundred often die in a single day in New York city, fed as they are on inferior milk, whereas probably not ten per cent. of that number would succumb if furnished the pure, natural, delicious milk as one article of their food.

Hence, in infants artificially fed, the habit of physicians in our larger cities is to send at once their little patients, affected with cholera infantum for instance, directly into the country, alleging, as the principal reason, the benefit to be derived from the pure air—whereas, as they may or may not know to the full extent, the efficient cause of the expected improvement is the improved, or rather the perfected diet the infant is to receive. This, surely, is a commendable fashion, and has been the means of saving thousands of precious little lives, and in the writer's opinion, a fashion that cannot become too general.

The causes of bad milk in the cities are various. They may be studied with a fair degree of certainty, but probably they can never be removed. Their nature is such that avarice and deceit can and will maintain the ascendancy.

The object of this paper is not so much to enumerate all the causes that contribute to the production of bad milk as it is to speak of the direct and decided injury that milk receives from the bad feeding of our dairies.

Because a cow will eat almost anything when it is hungry, is not proof that such food is always proper. I need not here refer to the long-estab-

lished fact that the character of the food gives character to the milk. For instance, mothers are well aware that indulgence in certain articles of diet affects her nursing child; therefore, she is careful in avoiding improper food. Physicians often prescribe remedies for the infant by giving them to the mother. Pavy mentions the fact that saffron and madder given to cows or other animals, colors the lacteal secretion; that cabbage and onions impart odor to this fluid; that bitter articles render it bitter, etc. The same authority informs us that both meat and milk may be poisoned by certain articles of food, without the animal itself being poisoned or even sensibly affected. Cows as well as human mothers may continue to secrete colostrum for a long period—of course an entirely improper food for persons of all ages. Infants may be purged or even salivated through the mother. Colds, and even fevers, are supposed to be taken from the mother.

Grass-fed cows, kept in warm, well-ventilated quarters, if healthy themselves, afford healthy milk, unless for some unknown reason colostrum continue to be unduly secreted. I know a marked instance of this: A family in the country kept two cows, both young and healthy; the milk of each was apparently identical. A child of the family was given for its ordinary diet the milk from one of these cows. When the child's mother wished to administer a cathartic to her infant, she gave it the milk from the other cow, and it was always sufficient. Now, suppose the mother had persisted in trying to rear this child on the milk of this second cow, the result can be readily anticipated. Clinical experience is worth more than all the theories that can be advanced. We may not always be able to point to the identical article that acts as the primary cause in inducing a child's discomfort or disease, yet such clinical experience may finally lead to beneficial results. A child begins, for instance, to decline in health; nutrition is evidently imperfect; its color is changed; its evacuations have an abnormal appearance; it is restless night and day. Send it away into the country, and rapidly it begins to improve; the mother or nurse neglects the doctor's medicine, the child is well. Now, what other process of reasoning can appear so plausible as that the diet has improved and cured the child? It is true, air is an important pabulum, but it surely is no more important than food; and here again clinical experience teaches us that perfected diet cures probably more cases than perfected air; one of these remaining unchanged. I say *more*, perhaps, in fairness, this expression should be

modified so that both appear equal. Each needs its share of attention; each must be jealously watched. Hence the conclusion is fairly this: bad milk is one of the serious evils, and is to be found almost exclusively in the cities, where milk is supplied by pedlars from the larger dairies, the managers of which make it a business for the very purpose of realizing the largest returns possible.

In such cases it is natural to strain every possible point that promises the largest profit. The dairies are kept at the smallest possible expense. The cows are huddled together in narrow, filthy apartments, often given the coarsest and cheapest of grass or hay; food that cannot be economized for any other purpose; dirty, coarse, half-spoiled clover, refuse material and slops from the house, rancid dish-water often, and refuse vegetables in a fermenting state; grains from sunken boats, that are sour and undergoing the putrefactive process; potatoes that are half rotten, and other damaged and worthless vegetables.

By such a process, a small farm often supports a large dairy; the number of acres, perhaps, less than half the number of cows. The country is ransacked for cheap feed; sugar-houses and breweries are besieged for every pound of refuse that can be produced—this refuse often, and indeed generally, in an advanced state of decomposition, if not soon becoming so—all fed as carefully as possible, and so long as its putridity does not prevent the poor cows from eating it. The small balance, if any, is then thrown away, with many regrets that animals would not gobble down the whole, good or bad. Such is too often the fountain that supplies our milk, and such is the description of facts that must obtain to a greater or less extent everywhere—that is, where dairy farming is made a business.

Milk we must have, and we must digest it as well as we can. Adults generally in health can accomplish the task, but out of health, it too commonly becomes a problem. The curd becomes hard and indigestible, especially in the stomach of a person, for instance, whose temperature during a typhoid fever stands at 103° or more; whereas, the curd of healthy, pure milk should be soft, porous, and easily digested.

Here comes the "tug of war." The patient must have active support to enable him to tide over the fever period; he must have concentrated food—food that contains all the requisites of the animal body, and as nearly as possible in their proper proportions. And we well know, pure milk is all this; all that we can ask for; nature's own food,

and, of course, perfect; a food that can hardly be substituted. Then to find our patient becoming restless, his temperature rising, having, perhaps, evacuations of undigested curd, or, more likely, no evacuations at all; bowels tender, with slight colicky pains—we cannot but make the resolve that, at any risk, we must discard the milk; and we cannot but harbor a hearty wish, further, that we could secure the pure, rich, perfect milk from the country.

After all, such a condition of things is nothing to that of a child that is to be artificially reared or largely fed on milk, especially such milk as is too often distributed to city consumers. Here not only the health, but the very existence of the child is in jeopardy. The little one dwindles, becomes diseased, drugs are carefully and skilfully administered, but fail; and the patient dies, virtually from the effects of a slow and insidious poison, namely, bad milk.

The various forms of improper dairying have been spoken of, and it remains only to allude to one which seems to me to be the most common and the most dangerous of all, viz., the feeding of sour or fermenting articles of whatever form or nature, either slops from the kitchen, wet grain, refuse grain, and other material from breweries and sugar-houses, or glucose factories; any and all of these, if in a fermenting state.

These, if fed in any but a very limited amount, deteriorate the quality of milk, and should be absolutely discarded by all dairymen. The happy day when they decide to do this will be undoubtedly long in coming, but as sure as intelligence increases among the masses to a proper extent, so sure is the day to dawn.

The importance of this question has not escaped the attention of our State Board of Health. See second annual Report, page 503; also page 704. I have in my possession an autograph letter from the Secretary of this Board, Dr. Elisha Harris, which refers to the point in question, an extract of which I here give. He says, "Concerning the wet and sour feed for milch cows, I can add nothing to what I wrote you some months ago. The cows become sickly and die in the course of two or three years. Their milk, at first redundant in butter, becomes disordered as organic disease and asthenia supervene."

"This Board now has four inspectors devoted exclusively to inspection and protection of milk supplies, and we hope that useful results may be attained."

It should be here stated that these refuse grains from brewing and glucose houses are not so inju-

rious if rapidly and perfectly dried, so that fermentation is perfectly and permanently arrested. This, however, I apprehend, is rarely accomplished, the fermenting process recurring after a number of days, because not fully arrested.

CHRONIC NASAL CATARRH IN CHILDREN.

BY HARRISON ALLEN, M. D.

Professor of Physiology in the University of Pennsylvania.

(Continued from page 231.)

Frequency and Diagnosis.—From a somewhat extended experience in the treatment of these and allied disorders, the writer has concluded that chronic nasal catarrh in the child is a rare disease, and must be separated from the catarrhs which are so common with the children in this community. A child otherwise healthy, who contracts a severe cold, may have a duration of the nasal discharge for a time, which excites the apprehension of the parents, and the advice of the physician is asked. If no other sign exists but the discharge, that is to say, if the characters already enumerated are absent, the case can be diagnosed, *subacute nasal catarrh*. If, however, in connection with the discharge, distinct evidences of malnutrition exist—as instanced in the skeleton—in the tonsils, nails, and teeth, the diagnosis of *chronic nasal catarrh* can be made.

Congenital Malformation.—While causes operating upon the fetus may be said to create the conditions which have just been recognized, it is also true that an entirely distinct class of pre-natal influences is effective in creating nasal catarrh. In a case of absolute atresia of both nasal chambers—with which condition was associated defective speech—the effect to the ear of the listener was almost identical with that produced in cases of cleft palate, notwithstanding the fact that the palatal and the pharyngeal mechanism were normal. In another case, that of a child three years of age, it was noticed that after an attack of scarlet fever the child could no longer breathe through the nose. The parents were inclined to attribute this condition to changes brought on in the nose by the attack of illness. Inasmuch, however, as the left side was absolutely occluded and the right side merely permitted a cotton-tipped probe to pass through into the pharynx; and in addition, the fact that the hard palate was narrowed and very high arched, while lachrymal obstruction and fistules existed on both sides, being more on the left, the conclusion was drawn that the condition was congenital, and was due to errors in the formation of the bones of the face. In this case

the angles of the mouth were excoriated, the cervical lymphatic glands were enlarged, and the existence of congenital syphilis was evident, although the teeth were not pegged nor the cornea hazy.

Effects of Local Injury.—The extent to which local injury influences the shape of the nasal chamber has a special bearing upon the subject of nasal catarrh in children. As a result of the frequent falls upon the face, it has been assumed that the deflection of the nasal septum, which is so common in the adult, may arise from this cause. While it is conceded that blows on the nose may deflect the septum, and thus induce obstruction and nasal distress, it is in the experience of the writer a rare occurrence. He has met with four cases only of such a condition, and in one of these a marked hereditary condition existed in other members of the family to nasal catarrh.

Prognosis.—The prognosis of simple cases of acute, and of subacute nasal catarrh is always favorable. The prognosis of the chronic cases should be guarded. Success depends to such an extent upon the recuperative power of the constitution of the patient, and to the character of the surroundings, that it is difficult to fix upon any one issue to all cases. It has already been seen that if neglected, the disease may be as noticeable in adult life as in childhood. Assuming the premises as to the nature of chronic nasal catarrh to be correct, it is evident that a cure cannot be expected until the development of the larger medullary cavities of the bones is completed. Under appropriate treatment the disease is so far kept under control that all suffering abates and disappears, at the same time that the general system remains in an unsatisfactory state. Of such cases, a reasonable hope may be held out that the disease will be entirely cured by the twenty-first year.

Treatment.—The details of the treatment may be embraced under the following heads:

(1) Removal of the obstruction of the discharges and the reduction in size of the swollen membranes.

(2) The applications of mercurial ointment to the vestibule.

(3) Straightening the nasal septum and overcoming atresia.

(4) The administration of general tonics, etc.

(1) The removal of the daily accumulation of the discharge in the nose and naso-pharynx is a matter of great moment. If the discharge is in the nose, it may be removed by dropping into the nose by a pipette (the head being thrown back) a few drops of a detergent lotion. In a short time

time the fluid is felt in the throat. It is very gratifying to notice the prompt relief which follows the judicious use of such remedies to the nasal mucous membrane, particularly, if the medicine be allowed to trickle in small quantities along the lower border of the inferior turbinated bone.

When a mucoid discharge collects in the naso-pharynx, it is best removed by the use of the pharyngeal syringe. The instrument used should be smaller than the one sold under this name. An instrument of convenient form can be improvised by attaching an Eustachian catheter to the nozzle of a No. 1 India rubber syringe, or to the smaller syringe used by dentists. The rule should be subject to no exception that the liquid is to be placed above the palate with the greatest care and gentleness, and a very small quantity, not over twenty to thirty drops of the liquid thrown in. After the instrument has been withdrawn, the head is bowed and the fluid is invited to flow through the nose and to trickle from the nostrils. A child who has had the instrument used with violence, will never consent to a second application. It must be remembered that the naso-pharynx in the child is very small, and becomes reduced to a mere chink when constricted, as at the time of the introduction of the nozzle of the syringe. The fluid thrown in cannot return into the oro-pharynx, but must flow forward. Should force be used by sending into the chamber a larger quantity of liquid than it can retain, and obstruction be present in the nasal chambers, the fluid will be exceedingly apt to pass up in the ears. Too much stress cannot be laid upon this source of danger, for, with the general disuse of that dangerous instrument, the nasal douche, in children, the impression is received that the pharyngeal syringe is a safe substitute. It is in the writer's judgment but little less dangerous than the douche, indeed, the source of the danger to the ears is precisely the same in the two instances. No doubt the physician can use the douche without danger, as he can the syringe, but if he habitually uses an instrument from which no aural complication can possibly arise, he is then, and then only, absolutely safe.

A few moments after the first application, or toward the close of the first sitting, the handkerchief having been used by the child, large quantities of mucus or muco-pus are removed, and the little patient is made relatively comfortable for a period extending from several hours to a day. Any detergent dissolved in tepid water suffices for the purpose of making these applications. No

specific action of drugs is to be anticipated. Weak solutions of carbolic acid and glycerine, namely about a drop of the acid to two drops of glycerine dissolved in an ounce of water, is as good as any. Boracic acid in almost any strength; common table salt; potassium chloride; are all in use with physicians, and are found efficient. It is not so much the remedy selected, but the manner of using it, that should receive attentive care. The use of astringents so universally mentioned, such as the preparations of tannin, of zinc, etc., can be, in the judgment of the writer, discarded. As for the preparations of iron, they are without exception mischievous.

(2) The condition of the floor of the nasal vestibule almost always demands attention. The use of mercurial ointments, such as are employed by oculists for blepharitis and granular lids, is followed by most encouraging results. The ointment of the red oxide of mercury, in the proportions of one grain of the salt to one drachm of cosmoline, is well borne. The ointment is best applied with a camel-hair brush to the interior of the nostril before retiring. An occasional application in the office to parts not accessible by an untrained hand is advantageous.

(3) The operations for misplaced nasal septum present no peculiar features in children, and the consideration of the procedures need not be undertaken here.

(4) In order to correct the discharge, which is apt to be of a simple character, it is necessary to care for the general health. The extent to which the tonsils should be reduced in size is to be determined by the degree in which they obstruct respiration. Should the premises given above respecting the etiology of the affection be accepted, it is evident that the tonsils need not, and indeed should not, be excised unless they are known to interfere with respiration, in which event they should be removed without hesitation.

BLOOD-LETTING IN THE OLD.

BY HIRAM CORSON, M. D.,
Of Conshohocken, Pa.

One who has read the paper which I wrote on the treatment of pneumonia by blood-letting, wishes to know whether bleeding would be admissible in these diseases in old people and in children.

I have observed, in talking with practitioners not wholly opposed to bleeding, indeed who occasionally use it, that they justify themselves in doing it, "because the patients were *strong, healthy, plethoric*

people." They based the propriety of the bleeding on the fact that these conditions existed, and not on the more important fact, that the loss of blood was essential to the speedy relief of the inflammation. My action in bleeding for the relief of inflammatory affections is based on the latter proposition without regard to age. In the present paper it is not necessary to speak of bleeding as a remedy in acute inflammation of important organs; *that* has been done sufficiently. Here I will give a few cases to show its value in other less striking, but more insidious and often not less fatal maladies, in persons of advanced age and children of only a few years. In doing this, I need not go back for cases which occurred long since, when bleeding was a popular remedy with physicians, and patients readily assented to being bled and cupped or leeches. These would not serve my purpose, for many of the opponents to the lancet admit that bleeding might have been very useful many years ago; but it is believed by them now that at some time since the advent of the cholera in 1832, and more especially since its reappearance in 1849, a great change has been effected, either in the nature of our diseases, or in the human system, or perhaps in both; they can't tell how it is, but they declare there is a change. Some are sure that the change is in the disease, others think it is in the system. They say: "The early settlers, who used to rise with the sun and labor all day, were strong and hardy, and could therefore bear depletion; but our people now have other habits, and are weak and nervous." It is not a little amusing to hear a man who has practiced only five or ten years talk about the conditions of disease and the human system as they presented themselves before he was born, as though he knew all about them, and yet refuse to listen to those who have lived and practiced through all the years in which these changes are supposed to have taken place. While I might report scores of cases of blood-letting in very aged people, bled with good effect many years ago, I shall for the reason already assigned pass them, and take those that have recently occurred, some even within a few weeks.

On the second day of the present June, 1881, I was called to see I. G—, aged sixty-nine years. He has been poorly for several days—indeed, for some weeks had not been able to do work in his garden—on account of giddiness and pains in all his limbs, which he thought was owing to constipation. I found him with a pulse of 76, entire loss of appetite, and inability to even sit up for more than a very short time. Cathartic pills and

aperients were given, and repeated so as to remove constipation, but in four days there was no relief. To use his expression, he "was sick all over the body as well as in the head." I bled him fourteen ounces. Next day found he had rested well, and his head was relieved. In two days, as I passed his house, I saw him sitting on the piazza, and he said he was quite relieved.

2. I was called to see Mrs. Cline on the 2d of May. She will be eighty-nine on December 20. She is a thin, spare woman, takes but little exercise—save a visit now and then to the neighbors, or to church, which is but a few hundred yards away. She said: "I have no peace with my head." Had a slight paralysis, she thinks, a few weeks ago. She had taken "physic" days before, but got no relief; had taken laudanum also, but was still suffering. I bled her only eight ounces, when the pulse which had been irregular became quite steady and regular, and I took no more. Two days after, I saw her, and she was quite free from pain or other suffering in the head. She is still free from pain, and moves about the house with considerable alacrity.

Three years ago a medical man of seventy-two years had been, for a few days, having an unpleasant feeling in his head. It was not a pain, but a dull, unpleasant sensation. Finally he arose one morning with an increase of the dullness and heaviness; and knowing how many persons during his long practice, had at that, and even earlier ages, dropped in a moment with palsy or apoplexy, after suffering from such feelings for a few days, many of them, as he believed, for lack of bleeding to relieve the oppressed brain, he concluded to be bled. Calling an assistant, he bled himself until he felt relieved, felt that the pressure on the brain was removed. The blood was set aside, and after awhile, feeling great relief, he was curious to know how much had been needed to give him so much comfort. On careful measurement there was found to be one quart—32 ounces. I saw him next day, and never did I see him in finer spirits, or in the enjoyment of greater apparent health.

3. A few years since I was called to a plethoric woman, over 56 years of age, who complained of "dullness and heaviness in my (her) head," not severe pain, but "a distressing feeling." She was sitting in the chair because she was easier than when lying in bed. I proposed bleeding. She had been greatly opposed to it for many years, was somewhat of a Thompsonian, and strongly wedded to No. 6, but she consented. I bled her

largely with some immediate relief. On my visit next day, she was found to be lively and well, and as a confession that she had not acted wisely in her long opposition to its use and her denunciation of it to others who might have been greatly benefited by it, she said: "I cannot tell any one how great was the relief obtained from the bleeding. I never could have believed it without this experience."

4. Mrs. N. J., a stout, fleshy woman in her seventieth year, sent for me June 14th, of the present year. For a week or more she has not felt well—has been languid, weary, and not quite right in the head. When awaking in the morning, or in the afternoon after a nap, she would feel so exceedingly weary and languid that she would not be able to rise, but after getting up she would stay up and go about the house directing affairs, yet all the time feeling exceedingly unwell. During the last three days another symptom has been present; when looking directly at an object, she would soon lose her sight; could not see it until she would turn her head and look at it sideways. This blindness has increased, so as to occur at short intervals, even when not looking specially at an object. Her face was not flushed, but had an expression of weariness; her pulse was strong, but only 70 per minute; the bowels were not costive—such was her condition. Was there danger in it? Yes, infinite danger—thousands had passed suddenly from that condition to unconsciousness and death. What should have been done to avert such an ending? Aconite and veratria were not called for by the condition of the pulse—quinine, or chloral, or bromide potassium, says some one—would have been the proper measure. I had used them in other cases not very unlike this one, but never with prompt and satisfactory results; so, instead of using them, bled her twenty ounces, while she was sitting up, and with some relief, diminishing slightly the strength of the pulse, and producing a lighter feeling in the head. It was then evening, and she retired for the night. The next day she was entirely free from any affection of the head, and the languid, weary feeling had passed away. From that time she was well.

(To be continued.)

ON PUERPERAL ECLAMPSIA.

BY D. MONROE, M. D.,

Of Cameron, Texas.

The pathology of puerperal eclampsia continues so mystified by the confusion of conflicting theories advocated and advanced by the learned ob-

servers, from the days of Hippocrates to the present time, that the student is more confounded than the builders at the tower of Babel.

Each pathologist advocates his line of treatment to conform to his own brilliant theory; hence such chaos as regards treatment.

After considering the mechanical, albuminous, uræmic, and anæmic theories, the latter a very anæmic one indeed, we come to the more plausible theory of Marshall Hall, the reflex motor action of the nervous system.

When the spinal marrow, the central organ of this system, has been acted on by an excited condition of an important class of its incident nerves, and this impression transmitted through the spinal centre, as an excito-motor centre, thence by reflex action over the whole muscular system, giving rise to a convulsion, whether such focus of irritation be hardened wax in the ear, carious tooth, undigested food in the alimentary canal, ascaris in the rectum, or a fetus in utero.

This morbid irritability of the womb, either from hyperæmia or anæmia, kept up by the presence of the fetus producing distension and tension of those irritated sentient nerves, causing this excito-motor radiation, known as puerperal eclampsia.

Accepting this as the true version of the cause of puerperal convulsions, the therapeutic remedies to be of use readily suggest themselves.

The first indication in the treatment is to guard the brain from undue blood pressure; the second, to prevent a recurrence; while the third is to remove the cause.

The subcutaneous injection of veratrum viride, or aconite, would fulfil the first indication; while chloroform and chloral hydrate meet the second by depleting the brain and its sedative powers over the nerve-centres, aided by the subcutaneous injection of *f. ex. gelsemium*, the therapeutic property of which is to abolish reflex power, by its direct action on the spinal cord, and through the same channel diminish the voluntary power. Hence we have in *gelsemium* a remedy which fulfils the indications exactly, accepting the theory of Marshall Hall. And we hold that no puerperal woman can have a convulsion when thoroughly under the influence of this remedy.

Calabar bean paralyzes the spinal cord, much in the same way as *gelsemium*; why not try it, as the calabar bean will control strychnine convulsions.

To comply with the third indication, we must

get rid of the focus of irritation—the fetus—as soon as practicable. Dilate with Barnes' dilator, if need be; and then deliver with forceps.

Case 1. Was called to see Mrs. —, æt. 18, primipara; found midwife in attendance, and was informed that Mrs. — was having "strange spells," and had been having them for several hours. Made an examination, and found vertex presenting and in inferior strait. Was told by the midwife that things had been in statu quo for seven hours.

In a few minutes, I fully realized what those "strange spells" were; that they were in reality that alarming foe, puerperal convulsions.

I immediately began the administration of chloroform, and sent after Dr. —, with orders to bring his obstetrical bag.

As soon as the convulsion ceased, I administered, hypodermically, *f. ex. gelsemium*, gtt. xij., and *veratrum viride*, gtt. iv. The pains being feeble, short, and inefficient, the os dilated and no contra-indication, as soon as she could swallow, I gave per orem liq. ergotæ purificatus, gtt. xxx.

In less than an hour, and before aid and instruments arrived, she was delivered of a large still-born child, without a repetition of the convulsions, and no hemorrhage.

The placenta being retained by an hour-glass contraction of the womb, we administered chloroform and removed it with the hand.

The child had convulsions, due to pressure of the cranial bones on the cerebrum, owing to ill-shape from pressure, for twelve hours after birth, whenever the chloral hydrate and bromide mixture was delayed too long.

Case 2. Called in consultation with Dr. — to see Mrs. —, æt. 34, in her fourth confinement. Was informed she had had already four convulsions; and was then in a semi-comatose condition. She had been bled freely from both arms, and had taken morphine sul., gr. ss., with hyd. chl. mit., grs. xx per orem.

We immediately gave *f. ex. belladonnæ*, gtt. iij., hypodermically.

In two hours was seized with the fifth convulsion, a very severe one indeed. Then we gave, hypodermically, *f. ex. gelsemium*, gtt. x. And in less than five hours she had her sixth and last convulsion, when we gave, hypodermically, *f. ex. gelsemium*, gtt. xij., and repeated the same dose in three hours. Again in four hours we gave, hypodermically, gtt. xv.

In five hours from this time she was delivered of a fine child, almost without a pain and no hemorrhage. Both mother and child did well.

DESTRUCTION OF SMALL ENCYSTED TUMORS BY CAUTERIZING THEIR WALLS.

BY LEVI W. HALSEY, M. D.,

Of Bridge Hampton, N. Y.

On June 16, 1883, Miss B., a German girl about twenty-five years of age, came to my office to consult me in regard to a bunch situated upon the back of the right forearm, immediately above the wrist joint. The tumor was as large as a hen's egg, soft to the touch, and slightly movable beneath the integument in all directions. By pinching the skin directly over it, I found it was free to move, thus showing that if closely connected at all it must be around and below the growth. It occasioned little pain except when the arm was actively employed; but the patient, being a hard-working domestic, suffered somewhat, and consequently sought to have it removed.

Mention of enucleation only alarmed her, and she positively refused to submit to an operation, desiring that I should give an ointment or application of some description, in any of which she professed great faith. I suggested the advantage of a more rapid extirpation, though without avail; so a prescription of iodoform and vaseline was given, to be applied twice a day.

After a week, as I had confidently anticipated, she returned, bringing with her a friend, and asked to have the tumor removed at once with the knife. Some influence had led to a change of mind, possibly the disgusting odor of the prescription recommended had its effect.

Thinking the mass could be easily enucleated, an idea which the examination fully warranted, and the patient seeming to have sufficient courage, I proceeded to operate without an assistant, as no anæsthetic was to be used, she preferring to do without one.

As is usual in removing small encysted tumors, a long incision was made through the integument, exposing the upper portion of the sac. I then endeavored to turn out the whole growth by passing the handle of the scalpel around it: these attempts were futile, as were all efforts to cut it out; for the sac walls were so firmly adherent to the adjacent tissue that they could not be separated unless the whole was removed in a lump. The latter alternative I did not care to adopt, as it appeared now to be more deeply seated than was at first suspected. Just at this juncture my patient was taken sick at the stomach, and then fainted. I hastily directed the young lady's friend to lower her head and dash water over her face and temples, and at the same time to hold a bottle of aqua ammonia at the nose. I then divided the

sac through its whole extent, and evacuated its contents—a thick, viscid, glue-like substance. It was thoroughly cauterized with the first thing I could select from my case, a strong solution of the chloride of zinc. The edges of the wound were carefully adapted, and retained in position by two sutures and adhesive plaster. Iodoform dressing was used to secure antiseptis. The arm was placed in a sling, and the patient ordered to refrain from work. Through the whole course of the incision healing was by first intention, except the lower portion, which was intentionally left open, that all pus and any unhealthy secretions might be discharged.

Suppuration was not profuse at any time, yet sufficiently so to effectually destroy the sac. The young lady experienced no inconvenience from the operation, save for the time the arm was carried in a sling. No change was made in the dressing, the first preparation being continued until granulation was complete and the whole wound closed. Free use of the arm was allowed after two weeks, without any bad effects resulting therefrom.

Now, after seven months, only a fine red line, marking the cicatrix can be seen where before was situated the unsightly bunch.

The success of the procedure was such that I should operate in like manner in all cases where the sac is found to be closely connected with the surrounding parts.

Destruction of small tumors by cauterization and consequent suppuration is not a new, but, in fact, an old way of proceeding; yet it is far preferable to the cutting and tearing so often witnessed in the attempt to extirpate small growths which are not readily enucleated.

Turn out the whole mass if it can be easily done; otherwise irritate the walls after its contents have escaped, and they will destroy themselves.

FATAL CEREBRAL EMBOLISM.

BY GEO. H. GOODE, M. D.,

Resident Physician Western Pennsylvania Hospital,
Pittsburgh, Pa.

J. G., æt. 27 years, was admitted to the Western Pennsylvania Hospital July 30, 1883. At the time of his admission, he was suffering with a stricture of the urethra. He had been under the care of Drs. Daly and Kersey for some time before his admission to the hospital, and the previous history of the man's case, as obtained from them, was simply as follows: Nine years ago he con-

tracted a gonorrhoea, at which time the urethra became strictured. Several times subsequently he had suffered with epididymitis. When Drs. Daly and Kersey saw the patient he was suffering with retention of urine, and an attempt was made to pass a filiform bougie into the bladder, and with success, but it was not possible to pass the tunneled sound. Drastic purgatives were administered, and at a subsequent attempt made on the following day, the physicians were able to pass several filiforms. The patient was then advised to go to the hospital.

Dr. Jas. McCann saw him, and was able to pass a No. 5 steel sound into the bladder. The stricture was dilated still further, by the use of sounds of larger size, which were passed with some little difficulty. After the use of the instruments, the patient had a chill, followed by elevation of temperature, indicating the occurrence of urethral fever, which entirely subsided by the next day.

On the following day (August 3) he complained of pains in his shoulder and elbow-joints, and said that he had had rheumatism several years ago. His heart was examined, and a distinct mitral regurgitant murmur was elicited. Salicylate of soda was administered in fifteen-grain doses every four hours. In the evening he expressed himself as feeling very well, and conversed very freely with a party of friends who had called to see him.

Early the next morning (August 4), the nurse called the resident and told him that the patient was snoring very loud, and could not be aroused. When seen by the resident, violent efforts were made, which proved of no avail in bringing out any signs of consciousness. He was breathing stertorously; at first there was nothing very marked in the appearance of his pupils, but later the left pupil became much more dilated than the right; the right side was paralyzed. The diagnosis made from these symptoms, in connection with the mitral murmur, was cerebral embolism. The patient continued steadily to grow worse, and died about five o'clock of the same day. On post-mortem examination an immense clot, which filled a greater part of the left cerebral hemisphere and breaking into the right, was found, thus proving the correctness of the diagnosis. The heart was examined, and upon the mitral valve vegetations were found. The kidneys and spleen were also unhealthy.

—Codeine phosphate has been prepared by Merck, at the suggestion of Prof. Hegar. It is soluble in four parts of water, and is suited for hypodermic injection.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE PHILADELPHIA HOSPITAL.

BY CHARLES K. MILLS, M. D.,

Professor of Diseases of the Mind and Nervous System in the Philadelphia Polyclinic; Neurologist to the Hospital.

Reported by WILLIAM H. MORRISON, M. D.

(Continued from page 233.)

Organic Hemianæsthesia; Methods of Studying Sensory Disturbance; Differential Diagnosis of Organic from Hysterical Hemianæsthesia.

You should next study the electro-sensibility. In doing this a rapidly-interrupted faradic current should be used. With this, two things may be determined: (1) The muscular sensibility, by the use of moist sponges applied with pressure; and (2) The cutaneous sensibility, by the use of metal discs or a wire brush. In this patient the use of a powerful current, although it causes a response in the muscles of the left side, is not felt.

This case is one which deserves in every way the designation of organic hemianæsthesia. When a case of complete hemianæsthesia, with or without paralysis, presents itself, the first important matter is to decide whether it is a hysterical affection, which can be cured, or a condition, the result of an organic lesion, which is beyond the possibility of cure. Let me give you a few points in the differential diagnosis. I shall first indicate the points of apparent identity. A hysterical patient may have just as complete hemianæsthesia as this patient presents. I have seen such cases in which a thousand needles could have been thrust into the flesh without producing any complaint. In hysterical cases, motor paralysis and contracture may also be present. The anæsthetic condition, moreover, may have continued for years, as it has in this woman. Other points of apparent identity might perhaps be mentioned.

In the differentiating of hysterical and organic hemianæsthesia, the history is important. The precedent history of these two affections is different. In the one you have a history of the hysterical diathesis; in the other, not. In the organic case, you have an apoplectic attack of a peculiar kind. The patient suddenly loses consciousness, and the temperature and pulse variations are peculiar. These are associated with special respiratory phenomena, perhaps with the Cheyne-Stokes breathing. The patient remains in a condition of absolute unconsciousness to all methods of investigation for a greater or less time, not simply in hysterical coma. Hysterical hemianæsthesia does not come on in this way. The patient may have hysterical spasm or coma, and remain in a condition of apparent or partial unconsciousness, but she will not have the peculiar phenomena of pulse, respiration, and temperature, which attend the apoplectic attack, and which were present in this case.

In hysterical hemianæsthesia, ovarian hyperæsthesia and hystero-epileptic seizures have usually been present; and you may have also ischuria and other well-known hysterical symptoms, none of which have been present in this case.

The anæsthesia in hysterical cases is most commonly on the left side of the body, but so it happens to be located in this case, so that this point is only one of slight value.

The paralysis and contractures, if present, as in this case, are apt to be accompanied in organic cases, after time has elapsed, by marked nutritive changes, by wasting of muscle, and even of skin and bone. This is not the case in hysteria.

Some of the older observers, as Briquet, who is quoted and criticised by Charcot, believed that hemianæsthesia from encephalic lesions differed from hysterical hemianæsthesia by the fact that, in the former case, the skin of the face did not participate in the insensibility, or that, when it existed, it never occupied the same side as the insensibility of the limbs.

Many recently reported cases have disproved the accuracy of this supposed diagnostic mark.

In his lectures, delivered nearly ten years ago, Charcot observed that up to that period anæsthesia of general sensibility alone appears to have been observed as consecutive on an alteration of the cerebral hemispheres, so that obnubilation of the special senses would remain as a distinctive characteristic of hysterical hemianæsthesia. He, however, expected that cases of cerebral organic origin would be reported, of complete hemianæsthesia, with derangements of the special senses, such as is presented in hysteria. His anticipations have been fulfilled. A number of such cases are now recorded. The present case is one in which the special senses are partially involved.

After the patient comes out of the attack, certain trophic changes occur in the apoplectic form, which do not appear in the hysterical variety. These are the acute bed-sores, and have been present in this case. The subsequent history of these two conditions is different. The hysterical patient will often recover and relapse, or, under proper treatment, may recover entirely; while all the treatment that can be given to a case of organic hemianæsthesia will produce no decided improvement, for there is a lesion in the brain which will remain forever.

We can say with some positiveness where the lesion is located in a case of this kind. It has, I think, been demonstrated that a certain region of the brain is concerned with sensation, or, at least, with sensory perception. Speaking generally, this, according to Fenier, is the parieto-temporal region. According to the same authority, the hippocampal convolution is especially connected with tactile sensibility. The optic thalamus is also in some way connected with sensation, and Lays goes so far as to contend that in this body are special centres for different forms of sensation. Unquestionably certain of the white fibres of the brain convey sensory impressions. This has been abundantly proved by autopsies and experiments. Section or destruction by disease of the upper posterior part of the internal capsule is followed by hemianæsthesia of the opposite side of the body.

This woman has had a clot or other lesion, which has destroyed the upper and posterior part of the internal capsule, and involving also the adjoining part of the lenticular body, the latter accounting for the motor paralysis. Another cerebral lesion which could cause these symptoms,

would be a diffuse lesion involving the sensory centres of the cortex. If it were a lesion of these centres, you would not be likely to have such complete anæsthesia of other regions as in this woman. As a matter of fact, for vascular reasons, the lesion is more apt to occur in the region previously mentioned.

Lesions of the optic thalamus also cause hemianæsthesia of the opposite side of the body; but whether by pressure on the internal capsule, or by direct effect, has not yet been satisfactorily determined.

In confirmation of the pathological diagnosis just made, I will read to you the condensed account of a case which is in almost every respect, except that the right side and not the left was affected, a counterpart of the one now before us. The symptoms presented are very carefully described, and the results of a post-mortem examination are given. The paper containing this excellent report is by F. Müller (*Berl. Klin. Wochenschr.*, 1878, No. 20, quoted in *Brain*, April 1878.)

The patient was a man, aged 61, suffering from chronic alcoholism and aortic insufficiency. About seven weeks before admission into hospital, he complained of headache, constantly increasing in severity, and of feelings of numbness, tingling, and creeping in his right arm. In a few days these symptoms were succeeded by an apoplectic seizure, with right hemiplegia and loss of speech. Speech was regained in eight days, and in fourteen days the patient was so far recovered that he could leave his room and attend to his business; he only felt a weakness in the hand and foot of the right side. He was admitted into the hospital, complaining of headache and cough. An examination of the nervous system revealed slight right hemiparesis; the movements on this side were somewhat weak, but were regular and well co-ordinated; on walking with the eyes closed, there was no evidence of ataxia. There was complete right hemianæsthesia. The patient was not aware of the loss of sensation, and was quite surprised at experiencing no pain on being pricked with a pin. The hemianæsthesia was slightly limited by the median line. The bones had lost their sensibility. Pressure over the liver was slightly felt. Tickling and pinching of the upper and lower extremities were followed by reflex movements; tickling of the right external auditory meatus was without effect. The conjunctiva and cornea, and the mucous membranes of the cheek, tongue, soft palate, uvula, nostril, glans penis and arms, were quite anæsthetic. There was a total loss of the muscular sense on the right side. Patient could not distinguish between objects of different weight; he was ignorant of the position of his limbs at any movement; and if told to move a limb, the movement being forcibly prevented, he would make an effort for a time and then cease, thinking the movement had been accomplished. The sense of temperature was lost on the right side. There was almost complete amblyopia of the right eye; the ophthalmoscope revealed nothing in the fundus which would account for this. The left eye was quite normal, and showed no trace of hemiopia. Hearing was so far affected on the right side that the ticking of a watch was only heard when the watch was in contact with the

ear; on the left side it was heard with the watch at a distance of 50 cm. Smell was completely lost on the right side, and taste was greatly impaired over the whole right half of tongue. The organs of sense on the left side were quite normal. Examination with the Faradic current showed complete loss of electro-cutaneous and electro-muscular sensibility; the minimal strength of current requisite to produce contraction was the same on both sides. The opening and closing shocks of a Stöhrer's continuous current battery of 30 cells, caused very powerful contractions, but no pain. On applying the negative pole to the upper eyelid (the lids being closed), and the positive pole to the cervical vertebra, the optical appearances known as Purkinje's figures were produced on opening and closing the current—in the right eye with six cells, Stöhrer, in the left eye with as few as two cells. On stimulating the right border of the tongue, there were muscular contractions, but no metallic taste. The patient died three weeks after admission of infarction of the right lung. On post mortem examination, a very sharply circumscribed focus of softening of the size of a pea, was found involving the apex of the third division (posterior point of external segment) of the lenticular nucleus and the adjacent white matter. Very careful examination failed to discover any other lesion. In discussing the case, the author quotes Pierret's statement that the hinder part of the internal capsule, or the adjoining part of the corona radiata, was found affected in thirteen out of fifteen cases of hemi-anæsthesia in which an autopsy had been made.

Returning to our patient, let me say in conclusion, that a number of experiments with metal plates, applied to the hemi-anæsthetic side, were made on this patient several years since, of which the following is an account. They are interesting, as showing how closely organic hemi-anæsthesia, even in this respect, resembles the hysterical affection:

On November 13, 1879, at 3.25 p. m., a copper plate was placed on the anterior surface of the forearm, immediately above the wrist. Half an hour later she complained of tingling and burning pain all over the forearm. The pain radiated along the ulnar side of the arm from the elbow to the wrist, and also around the edges of the plate. At 7 p. m. the plate was removed.

November 14, a zinc plate was, at 10.05 p. m., put on the arm just above the position previously occupied by the copper plate. About 4 p. m., she complained of burning pain over the arm from the shoulder to the hand. On the forearm the pain was described as being situated over the ulnar nerve, and also was felt beneath the plate, but not more distinctly than in other situations. The plate was removed at 7 p. m.

November 15, at 9.30 a. m., copper, zinc, and iron plates were applied. The iron plate was applied to the wrist, the copper plate to the middle of the forearm, and the zinc plate above the elbow. At 3.15 p. m. they were removed. She then complained of pricking sensations over the forearm on the ulnar side, and more especially beneath the copper plate. At 3.20 p. m. a copper plate was placed above the elbow, and an iron plate above the wrist. In half an hour she complained of burning pain in the middle of forearm, above the iron plate.

November 16, at 9 a. m., the plates were reversed, the copper plate being applied above the wrist, and the iron plate above the elbow. At 9 p. m. they were removed. At this time she complained of burning and throbbing pain over the whole arm, and the neck and shoulders, without reference to the plates, the pain coming on four hours after their application.

November 17, at 10 a. m., a copper plate was applied to the arm, and a zinc plate above the wrist. This was followed by pricking sensations from the elbow to the wrist, and burning pain to the neck.

November 18, at 10 a. m., iron and zinc plates were applied, the iron above the wrist, and the zinc above the elbow. They were removed at 7 p. m. She complained of burning pain over the arm below the elbow, and also of a sensation as though warm water were falling on the hand.

It will be observed that no transfer phenomena—no transfer of sensation or of loss of sensation—were at any time noted, an effect which is often produced in hysterical cases.

BELLEVUE HOSPITAL, JANUARY 5, 1884.

Reported for the MED. AND SURG. REPORTER by J. H. WOODWARD, M. D.

The cases incorporated in this report were treated under the supervision of Dr. Chas. McBurney, in this hospital. Their histories are offered for publication, because they form a series of consecutive cases, treated in the same general way, and with the same general result.

Case 1. Gun-shot Wound of the Thigh.

Robt. DeW—, æt. 26, was admitted to ward 10, November 29, 1883. A short time before his admission he had received a bullet wound in his left thigh. The wound of entrance was about three inches vertically below the anterior superior spinous process of the left ilium. No wound of exit was to be found. About four inches below the tuberosity of the left ischium, on the inner surface of the thigh, there was a large swelling, which had formed suddenly after the shooting. Both tibial arteries were pulsating. Patient was not heavily shocked, and he had not lost very much blood.

The house surgeon made an incision on the inner surface of the thigh, extending into the tumor already mentioned. Through this wound a 38-calibre bullet was extracted. A considerable quantity of clotted blood flowed from the thigh; but the thigh still remained enlarged in this region. An attempt was made at this time to pass a uterine probe through the bullet wound from the wound of exit to that of entrance. The probe deviated from the track of the ball, and its point was detected beneath the integument, one inch below the anterior superior spinous process of the ilium. It was exposed by an incision. A long piece of fenestrated rubber tubing was fastened to the point of the probe, and drawn through the thigh and secured in that position by a safety-pin at each end. A large tube was inserted into the region occupied by the extravasated blood, and another into the wound of entrance. Safety-pins were passed through these tubes to hold them.

They were then flushed with solution of corrosive sublimate in water, strength 1-2000. The wounds were dressed with iodoform, carbolized gauze wet in 1-40 carbolic solution in water, and borated cotton. The dressing was large and thick.

Full antiseptic precautions were taken during all these manipulations and at the subsequent dressings of the case. The thigh was washed carefully with 1-40 carbolic solution before anything was done to the wound. After having disinfected the part in this manner, it was irrigated with the solution of corrosive sublimate in water, gr. iv. to vj. This irrigation was nearly constant from the time it was begun until iodoform had been sprinkled upon the wounds. The hands, instruments, and sponges were rendered aseptic by carbolic acid, and the drainage-tubing had been immersed for weeks in a five per cent. solution of carbolic acid.

Nov. 30. Highest temperature since the shooting, $99\frac{3}{4}^{\circ}$. The discharge of bloody serum had penetrated the dressing, and a fresh one was applied. Ordered quinine gr. ij., and liq. morphine U. S. $\frac{3}{4}$ ij. t. i. d.

Dec. 3. Highest temperature since the last note, 100° . Re-dressed the case again to-day because the discharge had appeared again. No pus in the dressing. Washed out the tubes with bichloride solution. A similar dressing to that first applied was placed upon the wound. Two hours later, while the patient was straining at stool, a pretty severe venous hemorrhage came from the wound. Examined the wound at once, and found that the hemorrhage had ceased. The thigh was still considerably swollen, and presented a few traces of ecchymosis. Re-dressed as before. A second attack of hemorrhage occurred about an hour later, due to the same cause. The wound was examined immediately; the hemorrhage had ceased. Re-dressed as before. Stopped the morphine.

Dec. 5. Re-dressed the case in order to remove the drainage-tubes. Found the discharge small in amount and not purulent. Forced the bichloride solution through the thigh. Same antiseptic dressing as before. Highest temperature yet recorded in the case, $100\frac{1}{4}^{\circ}$. Average temperature, $99\frac{1}{4}^{\circ}$. Ordered lead and opium pills to constipate his bowels.

Dec. 10. Temperature range since the last note has been below 100° , excepting two rises to 100° on December 6. Patient vomited this morning, and again venous hemorrhage occurred from the thigh. Re-dressed the case as before, and found that the hemorrhage had ceased. Thigh is considerably larger than it should be, owing, no doubt, to the presence of extravasated blood. A rubber bandage was passed over the antiseptic dressing to make moderate compression of the wound. Stopped the lead and opium pill. Ordered calomel, gr. x.

Dec. 11. Bowels moved this morning. No recurrence of hemorrhage.

Dec. 13. Redressed as before. A small quantity of pus discharged from the wound on the inner side of thigh. Inserted a short rubber drain into this region. Thigh still swollen, but not tender; spots of ecchymosis over the swollen portion.

Dec. 14. Removed the rubber bandage. Ordered ferri et strychnie citratis, gr. v., t. i. d.

Dec. 17. Redressed as before, and removed the

tube. The discharge was trifling in amount, but purulent.

Dec. 21. Redressed. No pus in the discharge.

Dec. 28. Redressed. The wound has healed, and there remained only three small superficial ulcers. There is still a hard tumor on the inner side of the thigh. The temperature range since the 10th inst. has been below 100° .

Jan. 1. Allowed the patient to sit up in a chair.

On the 5th, he was allowed to walk about the ward at will.

Jan. 10. He was discharged, the wound perfectly healed; the tumor had disappeared, and the patient was as well as ever.

The hemorrhages were severe enough to warrant the supposition that the profunda vein had been cut by the bullet, and considerable anxiety was felt lest the patient should become sanguinated by repeated hemorrhage. A reasonable fear was entertained that the blood extravasated into the deep tissues of the thigh might form the focus of an abscess. Had the wound been treated with less thorough antiseptic precautions, there can be little doubt that abscess and prolonged suppuration of the track of the ball would have occurred.

It is proper to state here that it is not the custom in the service of Dr. McBurney to pass a drainage tube through the gun-shot wound before suppuration has occurred throughout it. In this case the drainage tube did not follow the course of the bullet, but opened up the planes of muscles at other points. By this, damage was done to the tissues of the part; but in spite of both injuries—that due to the bullet and that due to the drainage tube—the patient recovered, and he recovered without the production of more than $\frac{3}{4}$ ss. of pus in his wound.

(To be Continued.)

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Report of the Committee on Meteorology and Epidemics for the Years 1881 and 1882.

BY JOSEPH G. RICHARDSON, M. D.,

Professor of Hygiene in the University of Pennsylvania, and Member of the Philadelphia Board of Health.

[Read December 5, 1883.]

Meteorological observations for the year 1881 show that the winter months, as exhibited more in detail by the accompanying tables, were decidedly colder than the average, January being 5.7° below the mean for the past twenty-four years. The early part of spring was rather dry, but in June abundant rains occurred, and the average temperature was below the usual standard, although the entire summer average exceeded that of 1879 or 1880. The temperature of November was 4.5° above the mean, and but little ice or snow appeared during the following month. The most elevated temperature was observed on the 7th of September, when the thermometer rose to a height of $101\frac{1}{2}^{\circ}$. The lowest temperature was noted in February, when the thermometer fell to 1° ; the entire range for the year being

100.5°. The mean relative humidity was 70.3, and the total annual rainfall unusually scanty, only amounting to 30.21 inches.

The death-roll for 1881 comprised 19,515, or 22.48 per 1,000, being an increase over the previous year of 1804. Small-pox was by far the most prevalent among the epidemic disorders, causing death to 1,336 persons. Cholera infantum proved fatal to 902, scarlatina to 486, and diphtheria to 457 individuals. Typhoid fever was much more prevalent than in any twelvemonth since the Centennial year, and caused 645 deaths, 450 of these being among adults, and 195 children.

The early part of the year 1882 showed a rather low average temperature, the coldest weather in the two years now under consideration occurring in January, when the thermometer marked on one occasion half a degree below zero. The summer months were rather below the mean temperature for that season, and the maximum attained at the U. S. Signal Office exceeded 90° on two days in June, and six days in July only. The rainy season set in early, six inches of rain falling in August, whilst in September the precipitation reached the extraordinary amount of 12.09 inches. The total annual rainfall was 45.58 inches, being more than one-half greater than that of 1881. Rain or snow fell on 118 days during the year.

The mean temperature during the year was 54.6°, with a range of 94.3°, extending from a minimum of 0.5° below zero in January to a maximum of 94° in June.

The total mortality for 1882 was 20,059, or 22.62 per 1,000, being an increase over the previous year of 544. Smallpox, although much diminished in frequency, continued to rage with alarming severity, proving fatal to 314 persons. Diphtheria was the gravest epidemic disorder, causing 933 deaths, whilst the epidemic spread of scarlatina was so far diminished that only 310 individuals fell victims to that disease. Cholera infantum levied almost its usual tribute upon the rising generation, cutting short 871 lives.

A gratifying feature in the mortality reports of 1882 is the increase by nearly 12 per cent. of the number of people dying from old age, which proved fatal to 824 individuals; of these, 14 were recorded as being between one hundred and one hundred and ten, and one as being over a hundred and ten years old.

Although diphtheria has of late become increasingly and alarmingly prevalent in Philadelphia, our most serious epidemic disease during the past two years has been smallpox; and the obstinate continuance of this loathsome malady among us, as well as its gradual recrudescence from time to time, seems to call for renewed, and if possible improved measures towards its suppression.

The following suggestions having for their basis that principle of justice which prohibits men from even carelessly and unthinkingly injuring their neighbors, are submitted as a preliminary step to the establishment of some more efficacious plan of action for preventing the spread of epidemics.

Our efforts in this direction can perhaps be aided by diligently teaching our patients, when opportunity serves, the doctrine of disease-germs as held by most progressive physicians at the

present day. Indeed, the diffusion of popular knowledge upon this subject is, I consider, of immense importance from a sanitary, and especially from an epidemiological point of view, because as soon as the public is convinced that small-pox, diphtheria, typhoid fever, etc., are alone propagated by tangible and microscopically-visible germs or seeds, which are carried from the sick to the well, isolation and disinfection will be regarded not merely as hitherto in the light of wise precautions, but as imperative duties for every conscientious and law-abiding citizen.

The knowledge we now possess of the germ theory of disease, lends a new and stronger emphasis to the eloquent statement of Prof. Aiken in regard to the original spread and terrible fatality of small-pox in America from a single negro sailor, landed on the Mexican coast. "No common conditions of human life," he remarks, "gave rise to such phenomena as these. Propagation from the actual poison of a pre-existing case was the one necessary and all-sufficient cause for these endemic outbreaks of small-pox, and their epidemic prevalence. The precise mode in which the contagious diseases with their specific poisons first came into existence is beyond our ken—hidden from us as yet by a thick veil, and remaining an inscrutable, or at least so far an unpenetrated mystery. But everything tends to show that once created they all propagate only in one way—namely, by continuous succession."

An occasional failure to account for certain so-called idiopathic cases of contagious diseases, is only what we have in the nature of things to expect, and forms no evidence against the truth of this assertion of Dr. Aiken. For whilst we cannot always trace the obscure route by which germs of contagious maladies reach the healthy from the sick, most medical men in active practice are doubtless able to recall circumstances which go far towards explaining the mystery of their conveyance. Thus, for example, about twelve years ago there presented himself to me in the Out-patient Department of the Pennsylvania Hospital—a man covered with discrete small-pox pustules, who had been sitting muffled up and undetected, for more than an hour, in the waiting-room with twenty or thirty other patients, all unconscious of their danger of infection. In the epidemic of 1871-2 one of my patients whose nephew, a country lad here on a visit, was attacked with small-pox, dressed him up as a girl so that she could shroud him in a thick veil, and in spite of my remonstrances, took him by more or less crowded street-car, ferry-boat, and railroad train, to his home in New Jersey, of course at the risk of numerous lives. Again, during the same epidemic I attended two cases of variola in the family of a ready-made clothing dealer, whose coats and vests were probably all infected with the poison of small-pox, and went out of his shop on the backs of hundreds of customers, who were thereby subjected to the deadly peril of contracting that terrible disorder, without the slightest warning of their danger.

Admitting, then, that in some such modes as these the germs of every American case of contagious disease, occurring in the past two centuries at least, have emanated from some previous case, it is obvious that in a majority of instances,

a knowledge of the chance for such conveyance of the poison, in time to prevent it, was possessed by the patient and his friends or nurses only. Hence in striving to obstruct the progress of an epidemic, our efforts will be most apt to win success, if we can devise some means powerful enough to control the ignorance and carelessness of each patient, and those of his immediate attendants, from the earliest possible moment of the attack.

Such a check against the negligent as well as the wilful dissemination of disease germs, may I believe be found in some modification of the admirable proposition of Dr. Albert L. Gihon, Medical Director U. S. N., before the American Public Health Association, in 1881, and I therefore earnestly recommend it to fellow members of the College, for their individual consideration, perhaps at some future time for their official sanction and support.

Dr. Gihon, as Chairman of the Committee on the Prevention of Venereal Disease, presented a unanimous report, which contained the following section of a proposed act: "Be it enacted that any person within the limits of this State who shall knowingly communicate, or be instrumental in communicating, by any direct or indirect means, a contagious disease, such as smallpox, or scarlet fever, or venereal disease, shall be deemed guilty of a misdemeanor, and shall be subject, upon conviction in any of the Circuit Courts of the counties of this State, or in the criminal Court of the city of to a punishment of six months' imprisonment in the of"

Now, whilst I firmly believe in the strict justice and propriety of such a law as Dr. Gihon suggests, I fear that to urge it in its entirety at the present time in Philadelphia, would be making the grave mistake of trying to go too far beyond the present status of public opinion, and that even an attempt to punish the conveyance of the milder contagious diseases would not be sufficiently sustained by popular sentiment in our community.

But the horror of small-pox, which is often intense among populations in proportion to the density of their ignorance, would, it seems to me, so far aid physicians, and especially those of us who are members of the Board of Health, in an obviously judicious effort to obstruct the tide of its epidemic prevalence, that we might succeed in having passed and executed some law such as we have urged before our local legislators for two years, imposing a fine or imprisonment for the negligent or wilful transmission of that one disease, which would cause much greater care against the spreading of variola, to be exercised by those suffering from small-pox, or having charge of cases of that malady.

Our British cousins are far in advance of us in this respect, as is shown by the following extract from the *Sanitary Record*:

"At Athenry Petty Sessions (in Ireland), a shopkeeper in that town named Dillon was fined £3 and costs, with the alternative of two months' imprisonment at hard labor, for having, to the danger of the public health, appeared in public at Galway, while in the convalescent stage of small-pox."

What parent among us would not far rather a desperate highwayman should steal his watch,

than that a small-pox patient in the condition of this Galway scoundrel should simply brush against his unvaccinated child; and yet for the one crime the villain might be punished with years of imprisonment, whilst for the other, as the laws now stand here, no penalty whatever could be inflicted.

It perhaps would not frequently be necessary to institute legal proceedings against violators of a new law enacted to remedy this gross injustice, because, as a rule, the mere fact that a person might be compelled to suffer in person or estate, for injuring a fellow-citizen by infecting him with small-pox, would operate as a powerful check upon negligence, and could hardly fail to prove beneficial to us all.

As to the justice of punishing such instances of careless or wilful injury to life and health, it may be urged that murder by poison is just as much punishable by death, as is that by shot or steel, and that no valid distinction can be drawn between the moral guilt of one who kills his neighbor by giving him arsenic, and that of another who, under similar circumstances, causes the death of a fellow-being by giving him the germs (or poison, whatever it may be) of small-pox. If either crime is committed intentionally it ought to be adjudged a murder; and if done knowingly though without malice, or even ignorantly and carelessly, the homicide is still, it seems to me, deserving of punishment.

A man who empties his revolver into a crowd of people, would be held answerable before our courts for the lives of any who might be killed by his shots; and why should a person who emptied out from his lungs breath loaded with the germs of small-pox into the same crowd, be judged guiltless of deaths he thereby caused? Or why should it make any difference in the moral turpitude of the murderer's act, if a few of the crowd wore coats of mail in the first instance, or were protected by vaccination in the second?

The invisible messenger of death which is shot through the air in the former case, is not any more deadly to the stricken individual, than are the equally invisible germs of variola, as the graves of our 1,300 citizens dead from small-pox in 1881 testify. It is infinitely less dangerous to the public, because the leaden bullet ends its malevolent work with the human being it strikes down, whilst the vegetable missile may reproduce itself in its particular victim so as to originate a small-pox epidemic, and sacrifice in the community a hundred or a thousand lives.

The method for checking further dissemination of variola, which I have just advocated, is, of course, vastly inferior to that of establishing compulsory vaccination; yet I submit that whilst the latter plan infringes upon the personal rights of almost every one, the former curtails the liberties of a small minority only, and therefore, under our republican form of government, is far more likely to secure a majority vote in its favor, whether in the halls of legislation, or among the community at large.

—In irritable stomach complicating constipation, Prof. Da Costa ordered, at the clinic, oleum ricini floated on ice water, and said it would be retained.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Death from Rupture of an Aneurism of the Aorta.

Read by W. T. Taylor, M. D.

F. D. B., a letter-carrier, aged 26 years, came to see me on October 15, 1883, for a hoarseness; his voice at times being reduced to a whisper; a troublesome tickling cough, with an expectoration of frothy mucus; and pains through the left breast, extending sometimes down the left arm. He was slightly oppressed in his breathing after exertion, and generally debilitated.

He had not slept for several nights, and an apothecary had given him a chloral mixture, which did not relieve him, but "produced strange feelings and uncomfortable dreams," so that he would take no more of it.

On examining his throat I found a bifurcated uvula with the right branch much elongated; this was clipped off, relieving somewhat his tickling cough. There was slight dullness under the left clavicle, with some mucous rales, although the respiration generally was vesicular. The heart-sounds seemed distinct, but feeble, and the circulation was regular. His temperature was normal.

The mist. glycyrr. comp. with ammon. murias. was given to him for his cough and hoarseness. Tinct. iodine was applied externally to his throat and under the left clavicle, and the painful parts were bathed with linim. chloroform.

He was ordered to drink milk freely, to take beef-tea and easily-digested food.

For his insomnia I gave him a tablespoonful at bedtime of the following:

R.	Ammon. bromid.,	3j.
	Elix ammon. val.	
	Liq. morph. sulph.,	āā 3j.
M.		

This, however, only caused temporary rest, and had to be repeated frequently.

On October 26, as the hoarseness and cough still remained, I gave him some cod-liver oil and lactophosphate of lime, as a restorative, although I

did not consider him tuberculous, for there was no hereditary tendency to phthisis in his family, and he was well developed physically.

I advised him to go out on pleasant days, but not to tire himself with long walks, fully expecting that in a few weeks he would be able to resume his occupation.

The pains which affected his breast and left arm began to extend to the back, between the shoulder and up to the occiput, and became so violent that they could be only partially relieved by bathing with laudanum and chloroform liniment, and the internal use of anodynes.

On November 1, accompanied by his wife, he went to a bathing establishment to take a Russian bath, which some person had advised as being a positive cure for rheumatism. Arriving at the place he disrobed himself, preparatory to being bathed, when, on giving a slight cough, he raised some blood, which the attendant perceiving, he was advised to dress again. This he did partially, but in a few minutes such large quantities of blood issued from his mouth that Dr. Benj. Lee, who was in the building, was summoned to his relief.

The hemorrhage, however, was so excessive that he died in a few minutes.

An autopsy was made, the next day, by Drs. R. B. Cruice and Alexander, which revealed a rupture of an aneurism of the aorta at the intersection with the left carotid artery, which had opened into the trachea. The heart was of normal size, but its muscular fibres were very firm and large; the pericardium was distended with serum. There was some congestion in the upper part of the left lung, and some adhesions about the aneurism; but no tubercle was seen. The liver and other organs were healthy.

The pressure of this aneurism upon the trachea was the cause of his hoarseness and cough; but being behind the lung, I did not hear the aneurismal thrill, and, therefore, was entirely ignorant of the disease until it was revealed by the autopsy.

EDITORIAL DEPARTMENT.

PERISCOPE.

Probable Progressive Hemorrhage into Bowel, Depending on General Disorganization of the Blood.

Dr. R. M. Hodges reports this case in the *Boston M. and S. Jour.*, December 27, 1883:

Mrs. —, aged twenty-eight, mother of two children, and who, though never robust, had been in better health than usual during the past winter. Dr. Hodges was asked to see her at his convenience, as she was not feeling very well, although out and about as usual. At his first approach to her bedside, he was struck by the extreme lividity of her countenance, which reminded him of cholera cases. The tongue and fauces even were black, but the throat presented

nothing otherwise unnatural; the pulse was good; breathing quiet and calm; auscultation and percussion normal. No local cause for the condition could be detected, and there was no explanation of the appearance presented by the patient to be derived from her previous history. The only complaint made was of an annoying pain when, as she said, she hiccuped; the "hiccup" being in reality the eructation (in a very moderate degree) of gas from the stomach. An hour later attention was called to the patient's urine. But little had been passed during the night, and the specimen shown was less than half an ounce, and black like that in cases of carbolic acid poisoning. It was examined by Dr. E. S. Wood in less than an hour after it was passed, and contained one-fourth per cent. albumen, numerous brown,

granular casts, and much blood; the specific gravity being 1012. This suggested acute nephritis, and dropsy was expected, but it never came. In the afternoon there was a large, black, tarry dejection, not seen except by the nurse. Dr. M. Wyman, of Cambridge, visited the patient in consultation on the first day of her sickness.

The urine of the second day, also examined by Dr. Wood, contained no blood, but an immense amount of blood-pigment in solution, and a large quantity of serum albumen. Otherwise the same general characters remained. The patient's symptoms were unchanged, though the lividity had diminished. There was occasional nausea. She had one loose black dejection. There was considerable thirst, and simple food was relished. Dr. Wyman again saw the patient in consultation.

On the third day the urine regained its natural color, and the crystals of hæmatin disappeared. But one granular cast was found in a careful examination of five slides. The amount of albumen had, however, increased. The patient complained of severe headache, as well as pains about her waist, first on one side, then on the other, but they were never severe, nor was their nature comprehensible. Her color continued to improve, and she took milk, beef tea, jelly, and champagne, with much satisfaction. She had one dejection similar to that of the day before. Her intelligence and cheerfulness were not disturbed.

On the fourth and fifth days there were ten black and bloody dejections, some of them mixed with a good deal of transparent mucus, for which ergot and bismuth were given, and with apparent success, so far as the evacuations were concerned. The general condition continued about the same, and on each of these days she took and relished a chop, and some broiled chicken.

At the end of the fifth day she began to have dyspnoea and rapid breathing, and was restless during the night. This condition was first seen by the speaker on the morning of the sixth day, when the complexion had become sallow and the lips pallid. An eighth of a grain of morphia had been given the evening before, but this was thought to have nothing to do with the disturbed breathing, as she had taken it on other occasions without any unpleasant effect. The respiratory and cardiac sounds continued perfectly good, and at her solicitation the patient was placed in a chair for an hour at noon as a relief to the restlessness and dyspnoea. In the afternoon some slight râles were detected in the *front* of the chest, the respiration and percussion being elsewhere natural; the pulse fell from the seventies into the sixties, the heart sounds grew faint, the temperature went below normal, weakness increased, and death occurred at night. Dr. Wyman again saw the patient on this day.

At no time during the patient's illness did the amount of urine passed in twenty-four hours exceed two ounces. The temperature never rose above 98° F. She had very fair sleep at night, until that of the fifth day. There was never any somnolency or delirium, or any abatement of her cheerfulness and intelligence, until the afternoon before her death. The increasing pallor, together with the other symptoms which have been narrated, suggested that the fatal result was due to a progressive hæmorrhage into the bowel, appar-

ently owing to some general disorganization of the blood itself. There were no purpuric spots. Careful inquiry failed to obtain anterior evidence of any chronic renal symptoms, or other organic affection, or of any possible and recent drug poisoning. The patient had been frequently under the care of Dr. Hodges.

The treatment pursued was stimulating, supporting, anodyne, and expectant. Packing with blankets wrung out in hot water, and counter-irritation with mustard, were resorted to for the suppression of urine.

There was no autopsy.

The Influence of Iodoform on Body Weight in Phthisis.

Dr. A. Ransome thus writes in the *Brit. Med. Jour.*, January 5, 1884:

About a year ago, iodoform was introduced to the English medical public, mainly by Dr. Dreschfeld, as a drug likely to be of service in the treatment of phthisis, when used internally and by means of inhalation. I determined to give it a trial. At first I met with some disappointment; many persons, especially women, were unable to take it in consequence of the nausea and disturbance of the digestive organs that it caused. However, I still persevered, and gave it in the form of a pill, a grain and a half three times a day, to all the cases of phthisis who could take it. Shortly afterwards, at the suggestion of Dr. Marsh, I combined it with two grains of croton-chloral, and found that it was then much better borne by the patients, both male and female. Iodine and iodoform inhalations were also prescribed as a general test of its influence upon the disease. The weight of the patients was recorded for some little time before its use, and after its administration.

It seemed better to make no selection of cases, and it was given at all stages of the disease; and as patients seldom presented themselves in the incipient stage, the largest number of cases were in the more advanced stages of phthisis. The drug in several cases was stopped for various causes, and again recommenced.

Owing to the causes that I have mentioned, there are only 21 complete cases recorded at the present time. Of these, 4 were in the first, 5 in the second, and 12 in the third stage of the disease.

Of the 4 cases in the first stage, 3 appear to have received benefit; one (R. Jones) gained 2½ pounds in three weeks, and maintained her position for at least six weeks afterwards; another (S. Menzies) gained 2 lbs. in about one month, and although she lost weight somewhat on discontinuing the drug, she regained it again when the pills were recommenced. A third case (E. Lancell) gained 11 pounds in four months, and was then lost sight of. The fourth (M. Clevorty) lost weight on the whole to the extent of 8 pounds in three months.

Of the 5 cases in the second stage of the disease, No. 1 (McMillen) was losing weight rapidly when he commenced the treatment, at the rate of 3 pounds in a fortnight; he then gained 1 pound in the same space of time; lost weight on discontinuing the drug, gained again slightly on its recommencement, lost ground a third time on its omis-

sion, and entered on the third stage in about three months from the beginning of the treatment; but after again taking iodoform for several weeks, he improved and regained his former weight.

No 2 (Ross) also took the drug intermittently; he gained $2\frac{1}{2}$ pounds in ten days after first taking it; but after this it seemed to have little influence in arresting his downward course.

No. 3 (Brackenridge) presented a similar history, except that, in spite of sundry alternations of weight, he had on the whole gained somewhat in the course of seven months' treatment, during which time he had only omitted the iodoform for about three weeks.

No. 4 (Lockett) was a case of chronic pneumonia, which developed into phthisis after a lapse of four months. He was losing weight rapidly when he commenced the iodoform pills; but since then he has gradually improved both in weight and in the condition of the lungs.

No. 5 (Matthews) has only been a short time under treatment; but he has gained $3\frac{1}{2}$ pounds in the first fortnight.

Of the 12 cases in the third stage of the complaint, 2 (Burns and Burke) have distinctly gained weight since taking iodoform. Six, after sundry variations, remain approximately at the same weight, several after six or eight months of the treatment. The remaining 4 have all diminished in weight, with more or less rapidity. It is, however, remarkable that, even in these advanced cases, there is often a temporary rise for a short time after commencing to take the iodoform. Thus I note that, after a total number of 35 times of such administration, there were 28 periods in which there was an increase of weight, and only 7 in which the loss of weight continued without intermission.

From a review of all the cases, I am inclined, therefore, to attribute to iodoform some slight improvement, even in cases in which it was manifestly hopeless to expect cure; and I think that, in the earlier stages of the disease, it is decidedly worthy of further trial.

January 2, 1884. Since the above observations were made (August, 1883), the same treatment has been pursued in many other cases presenting themselves at the hospital, with very similar results.

Irritation of the Sexual Apparatus as an Etiological Factor in the Production of Nasal Disease.

Before the Baltimore Academy of Medicine, (*Maryland Med. Jour.*, January 26, 1884) Dr. Mackenzie first called attention to the early recognition of the relationship between overindulgence of the sexual powers and morbid conditions of the eye, ear and throat, by references to the medical writings of the ancients and quotations from the Latin classics. He had been unable to find any communication on the special part which such over-indulgence exerts in the production of nasal disease, in the literature of ancient or modern times.

To render the relationship between irritation of the sexual apparatus and nasal disease more intelligible, the anatomical structure of the nasal erectile tissue was explained, and the reflex and the *ab extra* influences which prove its erection.

Dr. M. believes that this tissue is especially concerned in the evolution of the many curious reflex phenomena observed in connection with nasal affections, and considers that the changes which it undergoes lie at the foundation of nasal pathology.

The physiological relationship existing between certain portions of the reproductive tract and the nasal erectile tissue appears (1) from the changes which the author has observed in the latter during the menstrual period. These consist either in simple engorgement, which may be uni- or bilateral, or may be associated with various reflex acts, such as coughing, sneezing, etc. The headache which occurs at the menstrual epoch may in some cases be due to the erection of this tissue; (2) from the presence of vicarious menstruation; (3) from the well-known sympathy between the erectile portion of the generative tract and other erectile organs of the body; (4) from the occasional dependence of phenomena referable to the nose during sexual excitement either from the erethism from amorous contact or during the consummation of the act of coition. Dr. M. believes that the congestion and consequent irritation of the nasal sensitive area thus brought about furnishes the explanation of the sneezing which has been observed during the performance of the latter; (5) from the occasional dependence of affections of the genito-urinary tract upon affections of the nasal passages; (6) from the connection between the sense of smell and erethism of the reproductive organs exhibited in the lower animals, and in those individuals whose passions are aroused by certain odors that emanate from the person of the opposite sex. From these facts, it is *a priori*, probable, that when carried to an excess, stimulation of the generative organs, from excessive use or disease, may not only become a factor in the production of congestive and transient inflammation of the nasal membrane, and especially of its cavernous tissue; but also become the starting point of chronic inflammatory changes in that structure. Dr. M. gave the following data, bearing on the subject from his personal observation in hospital and private practice: (1) nasal disease is, in a fair proportion of women, greatly aggravated at the menstrual period, and cases occur where the disease only makes its appearance at that time; (2) the discharge from nasal catarrh occasionally becomes offensive at the menstrual epoch, losing its disagreeable character with the decline of the ovarian excitement; (3) in ozena, the factor is much more pronounced during menstruation; (4) excessive indulgence in venery has a tendency to initiate inflammation of the nasal membrane, or to aggravate existing disease of that structure; (5) the same is true in regard to the confirmed habit of masturbation; (6) cases of nasal disease occasionally come under observation which are relieved upon the recognition and appropriate treatment of disease of the generative apparatus.

Dr. Mackenzie thinks that the above facts encourage the belief that irritation of the sexual apparatus may become a not inconspicuous etiological factor in the production of nasal disease. Whether this result from reflex action, pure and simple, as, for example, by virtue of the existence of correlated areas in the nose and reproductive

system, or as the sequel of an excitement in which several or all of the erectile structures of the body participate, the starting point of the nasal disease is in all probability the repeated stimulation and congestion of the turbinated tissue of the nose; and it is furthermore highly probable that morbid states of the latter may react upon certain portions of the generative tract.

The Direct Treatment of Spinal Caries.

The Med. Times and Gaz., January 12, 1884, says:

Good service was rendered to the subject of spinal caries, by the gauntlet which Mr. Treves threw down a few evenings ago at the Medico-Chirurgical Society. "Rien n'est sacré pour un sapeur" is a saying which will shortly be applicable to our modern surgeon, in that there will soon be few regions of the body which will be safe from his prying eyes, and his all-invading knife and fingers.

Spinal caries has long been one of the most troublesome and least satisfactory of those diseases which the surgeon has to treat, not only on account of its great inaccessibility, but also on account of the great extent over which it may and usually does spread. Moreover, the anatomical characters of the bones affected, viz., their sponginess and great vascularity, lend additional importance to any inflammatory process which may be set up. Expectation, therefore, ran high when the above paper was first announced, in which the direct treatment of spinal caries was to be advocated and backed up by the record of three cases in which the operation had been performed.

The outcome of the discussion, though of very great interest and importance, has not quite borne out what the title of the paper first promised, viz., direct treatment of carious bone. But, as a means of examining the lumbar vertebræ, of reaching any possible necrosed and loose fragments of bone, and more especially as a means of opening, draining, and treating abscess of this region on the most approved principles, the operation promises to be of great service.

Mr. Savory, in his usual masterly style, pointed out all the dangers which would attend the *satisfactory* treatment of spinal caries, by referring to the difficulties and contrasting treatment of tarsal caries, even since the use of Esmarch's bandage had so much facilitated this proceeding. Caries, said Mr. Savory, is not a primary condition, but is preceded by inflammatory changes; and, unless the whole of the diseased tissue could be removed, the operation might prove worse than useless. Moreover, there are other dangers which were not alluded to. In young persons, the subjects of this disease—mostly of a scrofulous or tubercular type—there is always the danger of setting up an acute tubercular process, which is rapidly fatal, either in the form of meningitis or of general tuberculosis. And lastly, the removal of carious bone will not always save life, even should the local mischief be cured, as one of the recorded cases proved.

Nevertheless, the proposed operation was carefully worked out on strictly anatomical lines, and its feasibility was demonstrated. For the removal of pus, it can hardly fail to be of the greatest service.

The only difficulty will be to recognize pus early, and this is certainly not an easy matter. One of the speakers referred to the relative frequency of pus collections in disease of the lumbar and lumbar sacral regions, as compared with other regions of the spine, and this will, in a measure, justify an exploratory incision when the disease is situated low down and the presence of pus suspected. We shall probably not have to wait very long for further records of this operation and can only hope that "the mania" for new operations, to which some speakers referred, will not outweigh that discretion which, in a surgeon especially, is even better than valour.

A Case of Gangrene of Extremities from Emboli.

Dr. O'Brien reports this case in the *Med. Age*: "I was called to attend a negro woman, æt. 32, in her second confinement. The labor was natural, and, as is the custom with these people, she was about the house in a week or ten days, feeling perfectly well. About four weeks after I was called again. The woman had awakened in the morning and found the right foot numb and cold. It was "dead," as she expressed it. Otherwise she felt as well as usual. I ordered the foot elevated and the limb wrapped in cotton batting. In a few days the skin began to slough, and the line of demarcation formed at the junction of the upper and middle third. Supporting treatment was given, and carbolic acid used on the gangrenous member. Her appetite was good, and she suffered no pain, resting well at night. She was cheerful and worked with her needle as she sat in her chair during the day. About six weeks from the commencement of the case, and while nature was doing such good work at the line of demarcation on the right limb, the left foot suddenly became cold, and gangrene was found present. A line of demarcation formed in the left some two inches lower than in the right limb. The woman's appetite remained good, and she rested good, suffering little or no pain. Knowing the case would be fatal, I watched it closely. On the tenth week both arms suddenly became cold, and I had a case of gangrene in both lower and both upper extremities. The woman now had considerable distress in breathing, and a rapid irregular action of the heart. On the fourteenth week pneumonia set in, and the case ended in forty-eight hours.

"Autopsy eight hours after death.—Post-mortem rigidity absent; body emaciated; line of demarcation well formed in right leg, in the left distinct. Uterus was removed and carefully examined. There was no evidence of any inflammatory trouble present. The changes following pregnancy had occurred naturally. The heart was enlarged and the valves studded with vegetations. The heart substance was soft and friable. The lungs were engorged and the pleura contained a quantity of fluid, which gushed out as the chest was opened. The femoral arteries were filled with clots, and the vessels occluded in the popliteal space by inflammation. The axillary arteries were filled with clots extending to where the vessel passes over the first rib. This woman had never had rheumatism or any serious illness; had never suffered any distress referable to the heart; on the contrary, had always enjoyed the best

health previous to her last confinement. Such was the history given me.

"Professor Blackman, of Cincinnati, in a pamphlet written by him some years ago, reports several cases of puerperal gangrene almost identical with this of mine. It is true this woman suffered cardiac distress during her illness. She had a rapid pulse and a blowing sound over the left heart. Evidently the trouble was from the detachment of vegetations in the left heart, and they of such size as to occlude the axillary and femoral arteries. But there is an apparent absence of any heart trouble until after confinement, so the puerperal state must have, by blood changes, developed the organic trouble in the heart.

"I made a post-mortem in a case of sudden death in a brother of this woman, æt. 28. The heart was as large as a bullock's, and the valves and chordæ tendinæ covered with vegetations; the heart substance friable. This man was a common laborer, but in spite of his every-day work, had never suffered any distress or symptom referable to the heart; in fact, he had never been sick.

Congenital Malformation; Urethra Opening into Vagina.

Dr. W. D. Wilkes reports this case in the *Med. Times and Gaz.*, December 22, 1883:

A private patient lately died in her ninetieth year; she had been a widow forty-two years, and had never borne a child.

Of late years I ascertained that she had frequently difficulty in passing urine. With this exception, an accident in 1880 (broken ribs and contusions of face and neck), she had always been well. In October, 1881, I was consulted for cystitis and retention of urine. On examination, I found a congenital absence of the orifice of the urethra in front at its usual place, and only a very contracted orifice of the vagina, barely admitting a probe, through which the urine could not pass at all.

Under chloroform I enlarged this opening, and afterwards small phosphatic calculi began to pass at intervals, formed in the bladder, forced by it into the vagina, and escaping from it with the urine. The calculi generally required removal, and at times quite stopped the orifice, and had to be broken up before extraction. The urine always contained blood, often in clots, and much muco-purulent matter. No probing of the vagina could detect the opening of the urethra into its roof, and the bladder could not be sounded. Neither sponge-tents nor drainage-tube could be borne in the vagina, and there was a refusal to submit to any kind of operation, such as exploratory lithotomy, or introduction of a drainage-tube from the front, for the cystitis and more easy escape of urine. Her sufferings when wanting to empty the bladder were very great—every hour or so during the night, but less often in the daytime. She also refused all medicines, and sedatives had to be given unknown to her.

I was allowed after her death to make a local examination. The bladder, thickened, contracted, and very vascular, contained fragments of phosphatic calculi, blood-stained and mixed with

muco-pus. A probe could be passed from the base of the bladder into the vagina, and onwards through its orifice, showing a congenital vesico-vaginal urethra. This opened into the upper wall of the vagina about one inch and a half from its orifice. The uterus was atrophied, and had a globular deposit of bone at the side of its anterior wall. Two or three similar deposits were forming at the fundus. The vagina was much dilated, forming as it were a second bladder; its orifice was much contracted, and had become an organic stricture, similar to that in a male urethra.

I have never been able to meet with a description of such malformation. I suppose that until the vaginal orifice contracted, no suspicion of it existed, as there had never previously been any examination of the parts. I hardly know what surgery could have done. It is doubtful whether it would have been possible to close what was the natural urethra, and establish an artificial one in its usual place. The bone pipe of an ounce ball-syringe was passed daily or oftener, and the vagina syringed out. This kept the orifice from further contraction, and favored the escape of the calculi. Had the patient allowed one, the best treatment would have been a free dilatation of the orifice to admit the finger, when the situation of the urethra might have been detected, and the opinion formed during her life confirmed; whilst the urine would have had an easy escape, and much suffering been relieved.

Sterility and Conception.

Rusconi, in an article of great interest (*Gazz. degli Ospitali*, October 24, 1883), discusses one or two aspects of these subjects. Having drawn a distinction between infecundity, an irremediable condition, and sterility, a condition that may perhaps be removed, he goes on to divide this last (sterility) into two forms, mechanical and mechanico-pathological. In the mechanical form, the entrance of the semen into the body of the uterus is prevented. Mechanico-pathological sterility occurs in cases of uterine catarrh and other ailments, where, even if the semen succeed in reaching the cavity of the womb, it is only after it has been damaged chemically, and consequently is no longer active. The time and the manner of conception are then examined. The fact that fecundation may occur midway between two menstrual periods has given rise to four different theories: 1, that ovulation is not periodical in woman; 2, that the ovum may reach maturity during the excitement of sexual congress; 3, that the ovum may remain fertilizable in the uterus or oviduct; 4, that the semen retains its activity in the uterus until the ovum appears.

In regard to the accelerated maturation of the ovum from sexual excitement, is mentioned the fact that girls who have never menstruated do so shortly after their first embrace. Then the author combats the old opinion that spermatozoa can make their way into the uterine cavity if they have been already abandoned only in the vagina. Pallen, Fraer, Rouget, and Kolbert, have all shown the falsity of such a doctrine. Experiments on the dead body are then related, which seem to put it beyond doubt that semen can enter the uterus only at the time of coition. The

rectum, bladder, and superficial pelvic fascia having been removed, the veins of the genital organs were injected. The uterus rose in the pelvis, the normal curvature diminished, the anterior wall became convex, the diameter of the cervix increased, and its external orifice dilated. At the time of the greatest engorgement of the vessels, the os uteri corresponds exactly to the centre of insertion of the vagina. Additional facts are drawn from clinical observation. In some cases of completely prolapsed womb, where irritation of the clitoris gives rise to insupportable orgasm, the mouth of the organ may be observed to open. Again, Pallen observed a case where the introduction of a speculum brought on the orgasm, during which the orifices could plainly be seen to dilate. Too great an intensity of the orgasm, however, is calculated to prevent conception, owing to excess of glandular secretions. As soon as the erection of the uterus is over, the mouth closes and the semen remains perfectly shut in. Hence injections used after coitus to prevent conception are without effect; unless, indeed, uterine contraction provoked by the cold water expel the contents. Injections of this kind, however, readily give rise to uterine catarrh and so cause sterility. In the author's opinion, the cure of sterility is not easily accomplished. Occasionally the results are fortunate; most frequently, however, there are insuperable obstacles. A caution is given, finally, as to the possibility of the failure being on the man's side. He has known a lady to be three years under treatment for sterility, the incapacity being really due to her husband, owing to the absence of spermatozoa in the seminal fluid.

Suppurating Hydatid of Abdomen: Free Incision; Recovery.

Dr. Felix Jones reports this case in the *Lancet*, December 15, 1883:

"On August 1, 1881, I was called to see R. T., aged fourteen, a slenderly-made youth, who had previously enjoyed good health. The history of the case was that he had taken cold about a week before; this was followed by rigors and tenderness over the abdomen, with gradual enlargement. No vomiting, bowels constipated, urine clear and scanty. Temperature normal. Circumference of abdomen, 30½ inches. Well-marked thrill; dullness on percussion over front and sides, as if the intestines were pushed upwards away from the abdominal wall.

"August 4. Circumference of abdomen 31 inches. Vomiting everything. Great pain in the back. Temperature normal.

"5th. Paracentesis was performed in two places in the linea alba below umbilicus, and four quarts and a half of thick creamy pus were evacuated. From this time all bad symptoms ceased, and the boy made a good recovery.

"In April, 1883, I was called to see the same patient, whose abdomen was again distending slowly and uniformly, more in front than at the sides, and simulating in appearance an ovarian tumor. No abdominal tenderness.

"May 10. As distension had increased rapidly, and the patient was much emaciated, I aspirated the abdomen in the linea alba, but no fluid came away. I tried a small trocar with the same re-

sult, the canula being blocked up with gelatinous material. The following day a large-sized trocar was used under chloroform, and about three quarts of creamy pus were removed. The swelling subsided, but there was great pain in the back. Ordered one-grain opium pill every four hours. In a few days the tumor commenced to refill.

"24th. While in the act of defecating, a quantity of pus and small hydatid cysts were expelled through the opening in the abdomen.

"June 1. Chloroform having been administered, I made an opening one and a half inches in length in the linea alba, an inch below the umbilicus, and opened the tumor; a large quantity of pus, hydatid fluid, and cysts, varying in size from a cocoanut downwards, were expelled. I passed my finger into the cavity to remove more cysts and to explore its direction; I found it apparently connected with the pelvis. The cavity was then washed out with a weak solution of carbolic acid, and a large-sized drainage-tube inserted. Ordered one-grain opium pill every four hours, and a liberal diet of wine, milk, beef-tea, etc. The patient appeared very prostrate after the operation. The cavity was washed out twice daily, iodine lotion being substituted for carbolic, and several more small cysts came away. The temperature for the next week only once rose over 100°. An epidemic of scarlatina existed in the town at that time, and unfortunately my patient was seized with it; but, notwithstanding that serious complication, he pulled through satisfactorily, and on July 18, when desquamation had ceased, was able to go about. On October 18, I saw him again, and he looked quite rosy, and was in excellent health.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—A small 12mo. volume of 68 pages, entitled "Hand-book of Eclampsia, or Notes and Cases of Puerperal Convulsions," has been prepared by five physicians of Chester county, Pa., Drs. E. Michener, J. H. Stubbs, B. Thompson, R. B. Ewing, and S. Stebbins. (F. A. Davis, Philadelphia. Price, 75 cents.) It relates the details of 44 cases in country practice, and is written with the object of showing that the correct treatment of this complication is to bleed promptly, freely, and from a large orifice. The cases were ably analyzed, and this plea for venesection should receive the most attentive consideration from obstetricians.

—In a reprint before us, Dr. E. W. Jenks, of Chicago, recites two cases of operation for fistula in ano "by a method similar to that for a torn perineum." The details are carefully stated, and the plan certainly promises favorably.

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THE LEGAL RIGHTS OF BOARDS OF HEALTH.

An important decision has been pronounced by the Supreme Court of the State of Louisiana on a subject which touches a class of professional men in all the maritime States.

An act of the General Assembly of Louisiana provides that every vessel which enters the port of New Orleans shall be inspected as to its sanitary condition by the resident physician at the quarantine station, for which he is to receive a fee fixed by the law, and not in any case excessive. The payment of this fee was refused by the Morgan Steamship Company, on the grounds that its exaction was unconstitutional, that the inspection was no benefit to them, but rather a hindrance, that it was a forced contribution, and hence against the policy of a free government, and on some minor technical grounds.

The lower court gave a decision in favor of the steamship company, but on the appeal the Supreme Court reversed the decision, and ruled in favor of the Board of Health. The grounds on which it did so are so pertinent to a series of similar questions touching the duties of physicians to State and municipal matters that we shall make a pretty long extract from the opinion. After ruling out as irrelevant various minor matters, the opinion proceeds:

This elimination leaves open, on this branch of the case, the solitary question, whether the fees and charges here involved are duties in the sense of the constitution? It is the well-established jurisprudence that there are many forced contributions which government may exact from persons and property which are not considered as taxes, duties or imposts, within the meaning or control of constitutional restrictions upon the power to levy the latter. Such are contributions provided for the construction of public works for the advantage of particular districts, like levees, drainage, pavements, etc., levied on property with reference to the supposed benefits derived by the property from the works; contributions provided to defray the expenses of building bridges, erecting causeways, or removing obstructions in a water-course, and like the light duty paid by all nations to the Danes, to be paid by such individuals only who enjoy the advantage; and fees or charges for services lawfully rendered, like wharfage, pilotage

and port-warden fees, to be paid by those who receive the services. *State vs. Navigation Co.*, 11 Mart. O. S., 324; *Crowley vs. Copley*, 2 Ann., 329; *Lafayette vs. Orphan Asylum*, 4 Ann., 1; etc.

As to the second point, that the services are forced and not voluntary, the reliance placed upon the decisions of the Supreme Court of the United States in the wharfrage and port-warden cases seems not well founded. In those cases there was no legal duty imposed on vessels to land at the wharves or to receive the services of the port-wardens. They had the perfect right to decline these benefits and services, and the court properly held that a State law exacting contributions for them, whether used or not, was unconstitutional. But had it been the legal duty of vessels to land at a particular place in the port of New Orleans, and had the city provided expensive wharves at such places, is it supposed that she would not have had the right to exact compensation for the facilities thus afforded, although vessels landing at the port would have no option as to accepting the use of them?

Finally, it is claimed that the services rendered under these quarantine regulations are for the benefit of the people of the city and State, and not for that of the vessel. No doubt that is true. It is equally true that the object of the city in building wharves was to benefit its own people, trade and commerce. We deem it unnecessary to consider more at length the objections which have been forcibly urged against the theory that the services in question are rendered to the vessel in such a manner as to justify the exaction of compensation therefor. What we have said sufficiently expresses our views on the subject; and while the question is not free from difficulty, even to our own minds, we are confirmed in our course by the reflection that it leaves the avenue open for correction of any error which we may commit, by appeal to the Supreme Court of the United States; whereas if we should err in the opposite direction, the defendants would not be entitled to that remedy.

In the first of the cases above quoted, Chief Justice Martin said that the words, "impost, tax, or duty," as used in the constitution or laws, must be confined to the idea which they commonly and ordinarily present to the mind: exaction to fill the public coffers, for the payment of the debt and the promotion of the general welfare of the country—and not to contributions as the supposed equivalent of benefits conferred or services rendered, like those above indicated.

It is apparent from the face of the laws here attacked, that the fees and charges complained of are demanded as compensation for labor performed, expenses incurred, and services rendered, directly in connection with the vessels, the necessity for which arises solely from the fact that such vessels, in the exercise of an undoubted right, yet voluntarily in pursuit of their own interests, choose to seek the port of New Orleans, well knowing that they cannot enter said port without first being inspected, and, if necessary, purified, in conformity with laws to that extent unquestionably valid. Can it be said that the rendition of these services, by virtue of which alone the vessel is enabled, lawfully, to proceed to her destined port, is not a service to the vessel?

It is said that it cannot be considered as a service, because the vessel does not regard it as such, but rather as a burden, and because she does not voluntarily seek or avail herself of it. As to the first point, the question would seem to be, not whether the vessel regards it as a service, but whether it is a service, and whether she ought to regard it as such. It seems the plainest development of the primal duty, *sic utere tuo, ut alterum non laedere*, that a vessel should seek and desire the performance of services the object of which is to prevent the chance of her spreading disease and pestilence amongst large populations. She is under the plain obligation, moral as well as legal, to do everything to avoid such risk; and the service which enables her to perform this obligation would seem to be a service to her.

The broad proposition of plaintiff, that in the exercise of the right to establish quarantine systems, the States are bound to bear all the expense thereof, and cannot throw the burden, in any manner or to any extent, upon commerce, has certainly not yet received the indorsement of the Supreme Court of the United States.

This final "broad proposition" in reality underlies the whole question at issue, and its clear enunciation and final decision is absolutely necessary to a comprehensive system of national sanitation.

The common sense view of the case clearly is that every man and company who are engaged in a business in any way liable to injure the public health, should be made to pay a sufficient sum to the public treasury to protect the public against the injury liable to result to it from the business.

THE PRESENT POSITION OF THE GERM THEORY.

The rapid strides which pathological histology is making are gradually overtaking the elusive "cause of disease." Hunted down to the lowest forms of animal and vegetable organisms, it may now be said to have been driven out of them and into a smaller field; in which we are close upon its tracks.

Not that the relations of germs, bacteria and bacilli, are no longer of importance; they are of great importance, but they are no longer directly causal, only accessory to the true causes, as these are now understood.

To explain this it may be stated that the study of the life-histories of the lowest germs has shown that while they are present in disease, they are also in health; that they may be cultivated and inoculated without producing disease, although generally they may produce this result; and that noxious and innoxious varieties present no objective differences, and are therefore probably identical, and act differently not because they are of different species, but because they are under different conditions.

Hence, it has long been suspected that the bacilli, etc., are rather the carriers of disease than its direct producers; and the inquiry has been directed toward what it is that they carry. Is it a chemical poison, or what?

The question now seems on the verge of a reply to the effect that it is some semi-organized ferment, something of the same nature as pepsin, pancreatin, etc., but differing from these normal and health-giving ferments, in that its action is destructive or injurious to the living animal cells, impeding their functions, or attacking their integrity—resembling, therefore, the so-called *ptomaines*, and similar products of decomposition and putrefaction. In the living blood a fibrin-ferment may be rapidly liberated, which will deteriorate the blood-cells and lead to septicæmia.

The introduction and production of these ferments—which have not yet been isolated and studied in any large number—are very generally associated with germ-migration and reproduction, but not always; and there is strong evidence for

the belief that this is only one of several ways by which the healthy system becomes exposed to their action.

The immediate future of the study of the causes of disease lies in the separation of the coincident phenomena from the real cause, and in the identification of these semi-organized ferments. The field thus opened is even a more difficult one than that of microscopical life; it belongs to pathological chemistry, and the methods for its successful exploration have scarcely as yet been discovered; but we may rest confident that the attention given to this central point of medical science will not long remain unproductive of practical results.

STATISTICS OF ALCOHOLISM.

Some rather startling figures have been lately published by the Bureau of Statistics, showing the consumption within the United States of proof spirits, wine, and malt liquors. The following table exhibits the total quantity of each consumed, and the per capita consumption:

	Annual av'ge for 3 years ended June 30, 1878.	Annual av'ge for 3 years ended June 30, 1883.	Increase per cent.
Distilled spts., galls.,	57,111,982	73,641,727	28.94
Wine, " "	19,812,675	25,248,233	24.43
Malt liquors, " "	310,653,253	508,977,788	63.55
Total.....	387,577,910	606,967,738	56.60
Cons'n per cap. gals.	8.36	11.49	37.44

These figures can be put in a different way so as to show the relation of consumption in 1883 as compared with the average of the three years ended June 30, 1878:

	Annual av'ge for 3 years ended June 30, 1878.	Year ended June 30, 1883.	Per cent. Inc.
Distilled spts., galls.,	57,111,982	76,762,063	34.40
Wine, " "	19,812,675	25,885,492	30.65
Malt liquors, " "	310,653,253	555,375,654	77.81

Professor Elliott, of the Treasury Department, estimates the total population in 1883 at 54,163,000. Upon that basis we have a per capita consumption of 10.18 gallons of malt liquors, 1.42 gallons of distilled spirits, a fraction below a half gallon of wine.

We here see that in spite of temperance societies, and all the efforts of the prohibitionists, the consumption of all these varieties of intoxicating liquors has increased greatly, not only absolutely,

but also in proportion to the growth of the population. As a community, as a nation, we are more given to inebriate indulgence than we were five or six years ago.

This ominous fact may well lead to serious reflection. Have the measures heretofore adopted to check this pernicious habit been ill-adapted to the end? Would it not be better if the purely medical view of the cause of inebriety were more generally received? We leave these grave questions to the serious reflections of our readers.

THE COLLECTIVE INVESTIGATION OF DISEASE.

This movement has met with great success in England, and is, no doubt, destined to aid us greatly in our warfare with disease.

The committee having the matter in charge, decide upon a certain disease which they desire to have investigated, and they then send out circulars, containing questions about this particular disease, which they request the different physicians to whom they are sent to answer from their experience.

A similar movement is on foot in our own country, and we desire now to suggest a plan by which every physician can make himself a benefactor to the profession, and materially assist in increasing our acquaintance with the phenomena of disease. Let each man keep a careful record of all his cases, jotting down notes at the bedside, and amplifying them at his leisure at home.

If he does this, and at the end of three or six months reads over his cases, he will be sure to find, no matter how humdrum may be his practice, some phenomena in some cases that have never been described. If he will then write a short concise article detailing his experience, and send it to some medical journal for publication, he will thus add his quota to the collective investigation of disease.

NOTES AND COMMENTS.

Bromide of Ethyl and Nitro-glycerin.

From *Breslauer Arztl. Zeitsch.*, we learn that Professor O. Berger has found bromide of ethyl use-

ful, (1) In neuralgic conditions of the nerves of the face and head, in megrim, and in nervous headache and heaviness. The inhalation of twenty to forty drops of the remedy several times a day has lessened headache in cases where quinine, salicylic acid, caffeine, and guarana, had all proved useless; and in three cases of headache connected with cirrhosis of the kidney it was better than any other remedy. (2) In neurasthenia: it is here given in doses of from one to three grammes twice or thrice a day, if necessary. (3) In epilepsy: here it is of very little use, although Bourneville and D'Ollier considered it useful. They narcotized their patients daily for ten to twenty minutes with it, but when given in doses of one gramme daily by inhalation it is useless. It is besides expensive, and causes much depression. When inhaled before or during the epileptic attack, it only prevents or cuts it short in exceptional cases. (4) In hysteria it is of more use. The attack of hystero-epilepsy may sometimes be cut short by narcotizing with it for ten or fifteen minutes, eight to twelve grammes of the drug being required. When given in doses of a half gramme to two grammes by inhalation once or twice a day, it may avert a threatened attack of hystero-epilepsy. (5) In several cases of psychical excitation, the bromide of ethyl has proved serviceable. The author finds nitro-glycerin also useful in headache.

The Dangers of Nerve-stretching.

That this valuable procedure may sometimes prove dangerous, the following case, reported by Westphal in the *Charité Annalen*, gives evidence:

A man aged 31, suffering from paralysis of the lower extremities, with spasmodic phenomena (startings of the limbs, exaggeration of deep and superficial reflexes, disturbance of sensation), was submitted to the operation of stretching the right crural nerve. Immediately after the operation a transient loss of the knee-jerk was noted, with stiffness of the muscles of the right limb. But incontinence of urine and stools, with contracture of the flexor muscles and the appearance of a large slough at the site of the operation, also appeared and endured. The patient succumbed three years afterwards. At the autopsy the brain, the pons, and the medulla oblongata were found to have islets of degeneration; the cervical and dorsal segments of the cord were the seat of a diffuse degeneration, which attained its maximum in the middle part of the dorsal region; finally, the right half of the lumbar enlargement was sown through with numerous foci of degeneration,

which Westphal considered as in all probability produced by the laceration resulting from the stretching of the right sciatic nerve. The weight of the authority makes the case worth recording in regard to the possible dangers of nerve-stretching.

Rational Hydro-Therapeutics.

Dr. George Lucas Pardington contributes an article with this title to the *Practitioner*, January 1884, which contains the following practical suggestions. A course of drinking cold water plentifully between meals has a very good effect on patients who lead a sedentary life, and whose secretions are scanty and defective; the secretions become re-established and effete matters are carried away from the circulation; the tissue metamorphosis also is rendered more complete.

The free use of cold water is of especial use in gouty subjects; the blood is diluted, the quantity of urine increased, and the excess of uric acid is rendered more easy of removal.

The action of cold water on the stomach is that of a stimulant—provided always it be taken in moderate quantities—the cold acting on the peripheral terminations of the afferent fibres of the vagus as a stimulus, causing an increase in the flow of gastric juice, and fitting the stomach for the reception of food; the movements of the stomach are also increased, and so the digestive powers enhanced. If the quantity of water taken be too large, the stomach is distended, its movements impeded, the gastric juice diluted, and digestion much impeded.

A tumbler of cold water taken on an empty stomach on rising, rapidly stimulates the peristalsis of the intestinal tract, thereby assisting in the onward passage of feces; this well-known remedy is an excellent one in cases of habitual constipation.

Some Causes of Inflammation of the Brain in Children.

One by one the various ills that afflict humanity are being attributed to bad hygienic conditions, and now Dr. John Ward adduces strong evidence in the *Lancet*, January 19, 1884, that several cases of inflammation of the brain in children, which he has observed, were caused by defective drainage. He says:

"That morbid states of the brain may be due to a poisoned state of the blood, the frequency with which brain symptoms manifest themselves in the progress of zymotic diseases attests; and we may, I think, reasonably infer that associated in-

sanitary conditions, which so powerfully predispose the human system to the development of the class of diseases named, may be alike provocative of the other class now under consideration. Nor should we suppose that the delicate vaso-motor nervous system, whether apprized of depressing morbid influences, present in the atmosphere, through the digestive organs, the lungs, or more immediately by its own functional activity being affected, would be slow to convey, through the blood, or more directly, to the great cerebro-spinal nervous system, with which it is so closely associated, a sympathetic influence. A period of time devoted to the interests of official sanitary work has afforded ample opportunities for observation, which appear to confirm the views herein advanced as to the association of insanitary influences with the development of brain symptoms, for the most part in children."

Curious Congenital Malformation of the Sternocleido-mastoid Muscles.

Dr. N. O. D. Parks, of Ashton, R. I., sends the following curious history to the *Med. Record*:

"On October 18, I was called to a primipara who had been in labor since 4 a. m. the previous day, in charge of a midwife. I found the breech presenting, and delivered her of a boy, healthy in every respect save that he was tongue-tied, and presented what I at first took to be enlarged cervical glands. These I subsequently caused to be painted with colorless tincture of iodine. This had no effect whatever in dissipating the tumors. On closer examination I then found a single cartilaginous tumor occupying the site of the sternocleido-mastoid, as if that muscle had been converted into cartilage; the sternal end being much more prominent, and feeling hard and rigid, exactly like the trachea. It appears to give the child no trouble, and could be manipulated quite roughly without eliciting any cry or other sign of discomfort. When the child turns his head in the direction of the tumor, it seems to cause pain by pressure on the adjacent parts. I told the parents it was useless to make any further applications to it, and that it was better to leave it to nature. As this seems, to me at least, a unique case, you may think it worthy of record, and if you or any of your readers know of similar cases, might offer suggestions as to the probable cause and treatment, if any, of such abnormality."

Lobelia Inflata in Asthma.

The *Med. Record*, quoting from the *Bull. Gen. de Therap.*, says that Dr. Fournier has used lobelia

to a considerable extent in his practice for the past twenty years in cases of asthma, phthisis, and pulmonary congestion. He has not found very much advantage in its use in simple asthma; but in cardiac dyspnoea, in doses of fifteen to thirty minims of the tincture per diem, he has obtained good results as a rule. In suffocative attacks occurring in the later stages of phthisis, when all other remedies failed, this drug was often of the greatest service. It was given in a mixture of one-half drachm to eight ounces of water, a tablespoonful every hour. The author relates some cases of sudden dyspnoea occurring in the aged, in which lobelia seemed to be of the greatest value. These attacks occur very suddenly; the patients are asphyxiated and pulseless and seem to be on the point of death, and indeed the termination is usually fatal. Dr. Fournier regards them as due to congestion of the lungs from paralysis of the vaso-motor nerves. In congestion from other causes the influence of lobelia is slight.

Humane Blistering.

When we think how painful the results of blisters are to our patients, and yet how valuable they are, we will hail with pleasure the following suggestion of Dr. Samuel Stretton in the *Brit. Med. Jour.*, January 26, 1884:

In an illness about fifteen years ago, I myself suffered considerable distress following the application of a large blister (which, no doubt, was instrumental in saving my life); but since that time I have never directed a similar torture for others, though I obtain satisfactory results from the blistering process I do employ. I direct the surface requiring such counter-irritation to be well covered with annular blisters about the size of the human iris, cut from vesicating tissue with an ordinary gun-punch, the centre being extracted with a punch of small size. Once secured to the surface, and covered with cotton-wool and bandage, these blisters require no further attention. The discomfort created is so slight that I never meet with the slightest resistance to their application.

Ulcerous Typhoid Sore Throat.

Dr. E. Rapin (*Rev. de Therap.*, January 15, 1884,) thus formulates his experience:

1. Typhoid fever affects the throat more often than is generally supposed; in fact, the first symptom may be a sore throat of an ulcerous nature.

2. The ulcerations are superficial, rounded, or, more usually, oval, with a slightly elevated bor-

der, hard floor, ordinarily indolent, and generally situated on the anterior pillars of the fauces, and on their anterior face.

3. Their diagnosis is sometimes very difficult; it is only by frequent examination and attention to the general symptoms that they can be certainly recognized. These ulcers seem specially to affect the lymphatic system; the lesions of the lymphatic apparatus are identical with those found elsewhere in the course of typhoid fever.

4. Their development is due to the direct penetration of the typhoid germs into the follicles of the faucial region.

Cancer of the Rectum.

Prof. Trélat (*Rev. de Therap.*, Jan. 16, 1884), formulates the following propositions in reference to treatment:

1. Cancers of the rectum which do not cause accidents should be left alone.

2. Cancers of the very extremity of the rectum, or of the margin of the anus, should be extirpated.

3. Accidents should be treated as they arise, but palliative measures are to be avoided. In this respect, he is in accord with Prof. Verneuil, but opposed to many English surgeons.

4. When the finger can be passed beyond the cancerous mass, rectotomy should be performed, otherwise not; but a way of derivation should be made by lumbar colotomy or by forming an inguinal anus.

Neuralgia of a Labium.

In one of our English exchanges, Dr. J. Matthews Duncan says: "I have never seen any neuralgia more intense than that of the cord in the male. One case in a clergyman I can never forget, it was so very severe. In woman I have only seen it distinctly a few times. The worst case was that of a stout old lady liable to bronchitis and asthma. In her it came only occasionally, but when it did come it was so severe as to cause much alarm; the pain ran along the cord or rather the round ligament in the right inguinal canal, and was most severe in the corresponding labium. It was soothed by kind attention, hot bathing being generally used, sometimes anodyne applications to the skin."

The Micro-Organism of Gangrenous Septicæmia.

From a foreign exchange we learn that Messrs. Arloing and Chauveau communicated, in July last, to the Société des Sciences Médicales de Lyon, the results of their researches on gangrenous

septicæmia. They are of opinion that the disease is caused by a special bacillus, which they have found around the wounds and on the phlyctenæ. The bacillus has the form of a short rod, provided with one or two spores, and can be inoculated by injection. Tissues deprived of their vitality, or disorganized by hæmorrhage, are most favorable to its action and reproduction. When fresh, the bacillus can be destroyed by a temperature of 90° to 100° C.; but, after desiccation, a temperature of 120° C. is necessary. Sulphurous acid and a warm solution of carbolic acid (5 per cent.) are, after heat, the best means of destroying this micro-organism.

Spasmodic Winking.

How often do we see boys and girls, otherwise attractive, rendered unpleasant to themselves and to others by a constant winking or twitching of the eyelids, which is usually attributed to "nervousness," and the hope expressed that "they will outgrow it." In *Memorabilien*, Dr. Friedreich Betz relates the history of a boy, fourteen years of age, who had suffered for several years from a bilateral nictitating spasm of the eyelids. Several physicians had attempted to relieve him, but in vain. The boy was healthy, and his eyesight good. He had, however, very long eyelashes, and the edges of the lids were reddened. Betz performed epilation of numerous lashes above and below on both eyes. The treatment was immediately successful.

How to Create Good Feeling Between Teachers and Students.

The number of professors at the German Universities is so great, and the reverence of the students so enthusiastic, that the celebration of some form of jubilee or another is a never-ending occurrence. That of Professor DuBois-Reymond has only just finished, amidst great enthusiasm, and now preparations are being made to commemorate the fact that just twenty-five years have elapsed since the renowned clinical teacher, Professor Frerichs, accepted the call from Breslau to Berlin. These celebrations are very commendable, as they serve to keep up a good feeling between the professors and the students.

Hydrastis Canadensis in Painful Menstruation.

In one of the recent numbers of the *Archiv. für Gynäkologie*, Prof. Schatz calls the attention of his colleagues to the value of tincture of hydrastis in many cases of painful menstruation, which hitherto have been supposed to need operative inter-

ference. The hydrastis contracts the vessels and lessens the genital congestion. Often by its use the pain attending the menstrual epoch is diminished or wholly removed. The preparation which Prof. Schatz uses and recommends is the fluid extract, as prepared by Messrs. Parke, Davis & Co., of Detroit, Michigan.

Cases of Trichinosis.

A report of sixteen cases of trichinosis from the Cologne hospital has been made by Dr. Leichtenstern. The more severe cases were characterized by high continued fever, the temperature reaching 106°-109°, which is attributed to the myositis. The disease lasted from fourteen days to eight weeks. Cold baths reduced the temperature. Quinine was of no value, while salicylate of soda seemed to have a favorable action. For the pains, tincture of gelsemium, application of ice bags, and subcutaneous injections of morphia were valuable, while bromide of potash and warm baths were useless.

Experiments with Cotoin.

An Italian physiologist, Dr. P. Albertoni, has been studying the action of cotoin. The extract obtained by æther from the coto bark is but slightly soluble in water, but readily so in alcohol and alkalies. In small doses to persons in health, it increases the appetite and does not produce constipation. Its action in checking diarrhœas is explained by Dr. A., though its observed effects of actively enlarging the small vessels of the intestines, and thus increasing their nutritive force, which, in diarrhœa, is impaired, and the food-material remains in the bowel as an irritant. He combines the cotoin with subnitrate of bismuth.

The Vomiting of Pregnancy.

From the *College and Clinical Record* we learn that Prof. Parvin believes that very many cases of the vomiting of pregnancy are due to coitus. In the treatment of this affection, he places at the head of the list tr. nuc. vomicæ, gtt. ij-ij every two or three hours, or else gtt. x before meals. Getting the idea from the similar successful treatment of ether nausea, he suggests water as hot as it can be drunk.

Iron Subcutaneously.

Some observations on the hypodermic use of iron have lately been published by Dr. Glaeveke. He used a ten per cent. solution of the *ferrum citricum oxydatum*, Germ. Pharm., which never pro-

duced ulceration. The iron passes off by the kidneys within twenty-five hours. The place of election for the injections is the nates or muscular tracts of the back. The iron solution should be made anew every two or three weeks. Given in excess, the drug produces symptoms of general malaise, sick stomach, and prostration. Its therapeutic effects in proper cases are prompt and satisfactory.

Tincture of Iodine in Papular Eczema.

Dr. L. D. Waterman writes to the *N. Y. Med. Jour.*, that in a recent case, started by two doses of morphine acting on an idiosyncrasy, where all soothing ointments, lotions, and internal treatment failed, I painted the aggregations of papules with Churchill's tincture of iodine, putting on three coats, well dried in, each time. Two would probably have done, for it blistered the whole surface. But in five days the cuticle peeled, the skin was left sound, and all the outlying untouched eruption had entirely disappeared. The cure was complete.

The Warm Foot-Bath.

If the observations of Dr. Sciolkowsky (*Memorabilien*, No. 7, 1883), are to be credited, our usual notions about the action of a warm foot-bath on cerebral hyperæmia are erroneous. He used water at a temperature of 92° to 97°, and found that while the temperature in the rectum fell, that in the axilla and external auditory meatus was increased.

Curative Gymnastics.

In one of our English exchanges Dr. Wahltsch points out the value of modern gymnastics and massage, if executed by competent and skillful manipulators, in predisposition to phthisis, in sluggishness of the abdominal muscles and digestive organs, in strumous disease, in rickets, in spinal curvature, in uterine affections, in hysteria, and in paralysis.

An Unsuspected Source of Disease.

Since parasites do infest everything organic, we are not surprised to read in the *Rev. Scientifique*, January 5, 1884, that M. Joannes Chatin has found a parasite in the common onion that gives rise to disease. M. Pasteur, who has examined it, finds it similar to the parasite of mildew in wheat, but with less vitality. The affected plants should be pulled up and burned.

CORRESPONDENCE.

The Practice of Vivisection.

EDS. MED. AND SURG. REPORTER:—

In the REPORTER of the 16th inst., under the title, "Anti-vivisection," remarks upon this subject are made having personal application to myself, although my name is not given. Of the meeting to which allusion is made, notice was contained in most of the papers the next day, my name, with many others, appearing. My position in reference to vivisection, my opinions and acts in relation thereto, may briefly be stated. A few years ago a paper appeared in *Scribner* entitled "Vivisection, Does it Pay?" The writer (his name escapes me), treated the subject frankly, rationally, and with due courtesy, arriving at the conclusion that it did not pay, as the benefits were not commensurate with the torments inflicted upon thousands of defenceless, helpless animals. To this ensued, in the same magazine, a rejoinder from the pen of Prof. H. C. Wood, written in the earnest, frank, and decorous style of the other paper.

Some time subsequent to the issue of his paper, I informed Dr. Wood that a third paper would probably appear, advocating neither entire prohibition of vivisection, nor leaving the door open to its indiscriminate practice by every one, but simply a restrictive act. To this he replied that he could see no objection, if not too rigidly restrictive. But again, another gentleman, holding a most distinguished position in the profession, pre-eminent in his devotion to the study and treatment of obscure affections of the nervous system, and, like Prof. Wood, enjoying a world-wide celebrity by his contributions in elucidation of difficult problems in physiology, pathology, and therapeutics, has intimated to me his concurrence in the sentiment of Dr. Wood in regard to a moderately restrictive act. Is there anything surprising in this accord of opinion? There are, probably, in this country not two other persons engaged in this line of research, who so perfectly comprehend, in all points, its difficulties. These admissions, then, do honor to both head and heart, and justly merit commendation and approbation.

My own paper, entitled "Thoughts upon Vivisection, with Reference to its Restriction by Legislative Action," was read before the College of Physicians June 1, 1881, and was decidedly conservative. In view of this statement I cannot feel that there is ground for the intimation of fanaticism on my part, nor that anything said by me, at the meeting alluded to, should have excited surprise. So far as obedience to legal enactments is concerned, there will always be found those who will disregard them, yet the experience upon this point, in England, is favorable, and would probably be no less so in this country.

GEORGE HAMILTON, M. D.

Philadelphia, February 18, 1884.

Scarlet Fever Contagion Conveyed by Letter.

EDS. MED. AND SURG. REPORTER:—

Believing what I have to write will be of interest, I ask to report some cases of scarlet fever as

occurring in my practice during March 1882, which I think will be almost conclusive as to the conveyance of the contagious material long distances.

I was called March 13 to the family of Mr. Muhler to see one of his children. This child was 6 years old, had high fever; sore throat, which on inspection showed the characteristic redness of scarlet fever; had vomited some hours before I saw it; the pulse was frequent, and the nervous system was considerably affected, characterized by startings and restlessness; in fact, all the symptoms pointed to scarlet fever. I informed the parents what I thought was the trouble, when the mother said: "Doctor, how is that? I have always understood that people did not take the scarlet fever without catching it from some one else." I told her that was recognized in medicine as a fact. She said, "Well, then, this is not scarlet fever, as my children have not been off the place (this was in the country, and the nearest neighbors were a half-mile distant,) for two months." I said, "Well, I can't help that, this child has had some chance to get the disease."

This case was a typical ordinary case of scarlet fever, going through the usual changes until recovery took place. In four and five days respectively two other children came down with the disease. There were four children in the family, aged 9, 6, and 3½ years, and 3 months respectively. There was nothing peculiar in any of the cases; all recovered without accident or sequelæ.

I was curious to know how the children got the disease. The mother (who, by the way, is a very intelligent woman) informed me that the family had occupied the house for three years; said the children had not been away from the farm for two months, and that no one had been in the house who had had the fever or been where it was. In fact, I myself had not known of nor heard of a case of the disease for some months anywhere in the county. So in talking of the strangeness of the cases, and of the disease in general, the mother said they were having it in Illinois, that they received a letter from her brother only a short time before, stating that her brother's family had just lost a child with scarlet fever. This letter contained a photograph. The letter was received only seven days before the first child was taken sick, and the children all handled the letter and picture. I am convinced that the letter carried the contagious material in these cases, at least in the first case. I neglected to say that the babe three months old escaped.

E. F. COWGER, M. D.

Riverton, Iowa.

"The Question of Women Doctors."

EDS. MED. AND SURG. REPORTER:—

I notice the comment of one of your readers upon the "question of women doctors," who apparently is opposed to women entering our profession on the ground that one female is interfering with his practice. I think the doctor rather selfish, and disposed to narrow the question down to whether or not he can successfully compete with the enterprising wife of an employee of the railroad, who, being free from "responsibility," has

captured some of his best families "by talking to the ladies." Now if the doctor has been practicing in his village for a longer time than this lady, and she can take from him the "lion's share of the practice," perhaps a more enterprising male physician could have done the same thing.

The doctor says "it is not right that we should encourage those who support no one, thus to rob us of our livings." Perhaps this lady does not support a large family. Is that any reason why we should discourage lady practitioners of medicine? Is this all the doctor is practicing for, to support his family? If so, and there are many such in the profession, the sooner we have a radical change of some kind the better for us.

The doctor should remember how much greater a task it was for this lady to attain a medical education than for him, exposed to the jeers of the opposite sex in dissecting-room and amphitheatre; her *frailer* body and her physical inability to endure the hardships of the physician's life, and the avenues for acquiring a "living" that are closed to her on account of her sex.

The doctor may lose his place for a time in the best families of his village, but when some affliction of an extraordinary character appears among the children of the families he has lost, I am afraid this enterprising lady may be requested to call in the doctor who has been "doing their practice?" Why? Because she is a woman. Women have little confidence in women as physicians. When a disease of a serious nature presents itself, men, heads of families, less. And if there is a niche in medical practice that woman can fill even temporarily, don't discourage her.

If there are women who, from a modesty inborn, suffer in silence rather than consult a medical man, the sooner we have competent women for them to consult, the better for humanity.

"But in our profession," you say, "the fact is well known that it is not an easy matter for an unmarried man to secure family practice." If this is so, and we have doctors who are too poor to support a non-professional wife, let them marry these independent female M.D.'s as soon as they have completed their education; this will do away with the Dr.'s plea of lack of "responsibility," and our now unmarried physicians will be "doubly light and girded for the race." * *

JAMES M. DONELAN, M. D.

Glenwood, Iowa.

Use of Carbolic Acid Hypodermically in Hemorrhoids.

EDS. MED. AND SURG. REPORTER:—

I am induced to reply to the enquiry of Dr. S. W. D., of Virginia, in No. 7, by the request of a prominent gentleman in the profession in Philadelphia. I would respectfully refer to a report made in the July number of the MEDICAL AND SURGICAL REPORTER, 1878, page 21. The patient reported is at this time attending the Law School in Philadelphia, and has had no return of hemorrhoids. Since the date of the report I have had frequent occasion to test the power of carbolic acid hypodermically, and with unvaried success.

How to proceed: If the pile is external, you place your patient on a table with the body on the right or left side, the anal extremity to a good

strong light, the knees drawn towards the stomach; the patient assured that there will be but little pain or suffering; the operator seated. Now pack the protruding pile with cotton wool saturated with cosmoline. Charge a good new hypodermic syringe with 6 to 8 drops of No. 1 Calvert's carbolic acid (fluid), fix the needle, insert it into the protruding pile, fill the pile carefully (skillfully), and the ordinary patient can get up, go about his business, and have little or no trouble. Treat one pile at a time; if more than one, let the parts operated on heal up before another is attacked.

The pain is likened to the sting of a bee, and is followed in a moment or two with a feeling of comfort. The pile being in a state of inflammation does not forbid the treatment, but rather invites it.

The periods between treatments may be 6 or 8 days. I allude to cases where more than one hemorrhoidal tumor presents itself.

When the enlargements or hemorrhoidal tumors are within the anal opening or contraction, a rectal speculum may be used, and can be gotten at any good instrument-maker's—I prefer those *with a slide of glass*. Place the sufferer on a table as before directed, take a small gutta-percha vaginal syringe, charge it with sweet oil, enter the anal region with it and anoint the rectum, withdraw the syringe, and introduce the rectal speculum. The natural color of the mucous membrane lining the rectum is "pale pink—almost white," an internal pile "sack" is of dark red or purple color, showing congestion.

The speculum should be so placed as to show the purple engorged spot; the glass slide should be carefully and slowly withdrawn until the engorged mucous membrane drops in a situation to be reached with the needle of the hypodermic syringe. The needle for internal operations should be about three inches long, and have a partially bent point—the bend to be just at the point. Piles are usually in the verge of the anus, or on either side of the internal region. I have never found them back or front.

Several times there has been some hæmorrhage, which has always yielded to the application of a solution of ferri subsulphas, either locally or by injections.

J. W. C. O'NEAL, M.D.

Gettysburg, Pa.

NEWS AND MISCELLANY.

The Effects of Cotton Sizing on the Health of the Operatives.

The *Med. Times and Gaz.*, December 8, 1883, contains the following practically valuable remarks:

Dr. J. H. Bridges and Mr. E. Haydon Osborn, the Commissioners appointed by the Home Office to inquire into the effects upon the operatives of the process of heavy sizing in cotton manufacture, state in their report that though notable changes have taken place during the last ten years in the proportion of the various ingredients used in the process, the amount of dust in weaving-sheds has not proportionately increased. There is no doubt that the change effected by steaming the atmosphere of weaving-sheds is to create an artificial

climate of a somewhat tropical and relaxing kind, whilst there is a great unwillingness to admit fresh air into the weaving-sheds owing to the artificial and unstable composition of the warps. During frosty winter afternoons, and when steam-jets have been for hours in full operation, and when the products of gas combustion have been added to the exhalations from the lungs of the work-people, the atmosphere of a weaving-shed must be in a high degree injurious to constitutions predisposed to pulmonary disease or dyspepsia. The conditions of the work are not such as to prevent that large proportion of work-people whose constitutions are naturally vigorous from following their calling without serious inconvenience. But there remains the proportion, always very considerable, who have a constitutional tendency to one form or other of rheumatic, phthisical, or dyspeptic ailments. Such tendencies cannot fail to be intensified by working continuously in an ill-ventilated atmosphere pervaded by mineral dust or rendered artificially damp. The remedies recommended by the Commissioners are—first, that those processes by which very large quantities of size can be incorporated with the warp without necessitating the diffusion of dust or moisture, but which are at present trade secrets, should become generally known and applied. Secondly, that more effective means should be taken to apply these means where they exist. In many dusty occupations, notably in that of flax-heckling, it is a most important mitigation of the evil that they are carried on with open windows. The air of the work-room, where this is the case, is probably changed more than a score of times during an hour. It may be doubted whether with the majority of weaving-sheds it is effectively changed once during the working-day. Thirdly, that as the business of weaving has become from various causes one of great complexity, and requires an amount of skill, and even of scientific knowledge, such as appeared to the Commissioners to be not unfrequently wanting, measures should be taken for diffusing elementary information with regard to the qualities of the atmosphere. In a manufacturing process in which the quality of the atmosphere is so important, it might have been expected that means would be taken to ascertain with some precision facts capable of such easy and exact measurement as temperature and moisture. Yet it is very rare to find a thermometer in a weaving-shed; and a hygrometer, simple though the instrument is, appears to be entirely unknown. The diffusion of elementary information on these two points, combined with a recognition of the paramount importance of ventilation, would go far towards the provision of remedies, or at least of effective palliatives, for the evils complained of.

Contra-indications for the Administration of Anæsthetics.

After reporting a case of death from heart-clot following etherization (*Boston M. and S. Jour.*, December 13, 1883), Dr. Francis Minot says:

So far as we are justified in drawing conclusions from a single observation, we may learn from the above case:

1. That etherization is not altogether safe for a

patient with a large effusion in the chest, and should not be employed if it can be avoided.

2. That when employed, unusual care should be taken to prevent accidents, and especially that the patient should be inclined towards the same side with the effusion.

The case also confirms Dr. Bowditch's law, that the presence of blood in the fluid removed from the chest is a strong presumption in favor of cancer of the lung or pleura, or both.

The Berlin Polyclinic.

This institution celebrated last November its first anniversary day. During this time more than two hundred medical men, amongst them many strangers, have visited the Berlin Polyclinic, in which at present the following specialties of medicine are taught:

1, Ophthalmology; 2, Operative Surgery of the Eye, and Practical Instruction in the use of the Speculum Oculi; 3, Neuropathology and Electrotherapeutics; 4, Laryngoscopy and Oesophagoscopy; 5, Otolary; 6, Physiology; 7, Dermatology; 8, Syphilology; 9, Histology; 10, Forensic Chemistry.

These specialties are taught in monthly courses, which begin every first working day of the month, and last every day during the whole month, except Sunday and holidays.

To the Berlin Polyclinic two laboratories, one for chemistry and one for histology, are attached. In both, medical men find ample opportunity for executing researches on scientific objects. The first of January a third laboratory, destined for working in bacterioscopy, will be opened. At the same time a monthly course of bacterioscopy will be united to the other courses.

A Good Example for County Societies.

In view of the enormous number of half-cut doctors that are annually licensed to prey upon the community, it affords us pleasure to note that the Trumbull County Medical Society, of Ohio, at its meeting January 31st, passed a series of resolutions which provides for securing a preliminary examination of all proposed students of medicine who enter the offices of the members of the society.

A board of examiners is appointed, before which all applicants for admission as students of medicine under the tuition of members of the society must pass a satisfactory examination in fourteen different subjects. The examination is in fine about the equivalent of that demanded for admission to a classical college.

Medicine among the Primitive Irish.

In the *Dublin Jour. Med. Sci.*, January 1884, Dr. A. Macalister tells us that the primitive Irish did not, apparently, consider medical science as a branch of general culture; and from O'Flaherty we learn that in the University founded at Tara in the third century by Cormac MacArt, the schools were of military science, of history, and of law—none of medicine. In these, and even later in early Christian times, the physicians were a set of hereditary dependents attached to the leading septs or families. Thus the O'Hickeys were the physicians to the O'Briens of Thomond; the O'Lees to the O'Flahertys; the O'Shoils to the MacCoghlan and to the MacMahons of Oriel.

A Portable Disinfecting Oven.

Dr. Albinois, of Marseilles has designed a portable disinfecting oven which, it seems, possesses much merit. It can be carried from place to place, since four men can easily handle it. Half an hour and a very small quantity of fuel suffice to produce the necessary heat, and there is a small vessel for the evaporation of fumes derived either from thymic or carbolic acid placed within the oven. The apparatus is made of iron, and only costs \$110.

The Moses Taylor Hospital at Scranton.

Mr. Moses Taylor, of New York, bequeathed \$250,000 to this hospital; and now his daughter and her husband, Mr. and Mrs. Percy Pyne, have presented \$100,000. It is a great pleasure to record charitable bequests to hospitals and educational institutions, and we only wish that we had much more of it to do.

Where American Pork Can Go.

The Department of State has received a telegram from Mr. Eugene Schuyler, United States Minister to Greece, saying that the prohibition of the importation of pork from this country into Greece has been abolished.

Items.

—Prof. Bartholow strongly recommends salicylic acid, either by injection or internally, in large doses, for cystitis. Administered by the mouth, it acts after being excreted in the urine.

—Panklastit, a new explosive, said to be more powerful than dynamite, is made by the action of hyponitric acid—generated by heat from nitrate of lead—on carbon bisulphide.

—An interesting pathological and clinical account of cases of trichinosis observed during the recent severe epidemic at Emersleben may be read in the *Gazette Médicale de Paris* for January 12.

—The immense crematory at Rome is in almost daily use. Cremation is becoming daily more popular, and bids fair soon to dispose of more corpses in the Italian capital than does the old-fashioned burial.

—Prof. Gross suggests the following:

R.	Tinct. cantharidis,	3 iss.
	capsici,	gtt. xx.
	Glycerini,	3 ss.
	Aque colognensis,	q.s.ad 3 vj.
Sig.	—"Hair Tonic."	
		M.

—Prof. Gross strongly cautions against telling a man with a history of any kind of a sore on his penis that he does not have syphilis, until three months have elapsed from the last connection. The sore may not be a chancre, but a chancre may be incubating.

—Nature reports that Prof. Heiberg, of Christiania, has demonstrated the presence in the air-passages and pulmonary substance of hares of a form of strongylus, both barren and charged with ova, which would appear to be the cause of an otherwise unexplained mortality among these animals in the autumn of last year in the district of Eidswold, in Norway.

—A set of rules regulating the mode in which medical instruction is to be imparted to women in local colleges, and setting forth the terms upon which females are to be admitted to medical degrees, has been published under the authority of the Bombay Government.

—At the meeting of the Royal and Imperial Society of Physicians at Vienna on October 19 (*Wien. Med. Blätter*, October 25), Professor Drasche gave some information regarding the spread of cholera by means of washing; three laundresses in a laundry in Dornbach having fallen victims after washing clothes from hospitals in Vienna, where sporadic cases of cholera had occurred.

OBITUARY NOTICES.

JOHN L. H. SESSUMS, M. D.

Dr. John L. H. Sessums died at Lonoke, Ark., after a lingering illness, January 19, 1884. He was a graduate of Bellevue Medical College; a good physician, a fine surgeon, an honorable citizen.

DR. GEORGE P. OLIVER.

Dr. George P. Oliver, President of the Medico-Chirurgical College, died suddenly on Wednesday night at a meeting of the Knights of the Golden Eagle, of which he was the founder. Dr. Oliver, who was about 56 years of age, was born in Kensington, Philadelphia, and all his life, with the exception of a few years spent in New York, has resided in this city. He was a graduate of the Philadelphia Medical College in 1851, and of the University of Pennsylvania in 1859. He was a prominent member of a great many Orders, among which were the Masons, etc.

DR. J. R. EVANS.

Dr. J. R. Evans, who died recently of paralysis at his residence in Branchtown, Pa., was one of the most prominent physicians of Bucks county. He was a member of many medical societies and the Masonic fraternity. He was 57 years of age, and a very large and muscular man, weighing 250 pounds.

DR. CHARLES M. FORD.

Dr. Charles M. Ford, a prominent physician of Washington, died lately at his residence on Capitol Hill. Dr. Ford was about 43 years of age, and was a native of New York. He studied his profession in Philadelphia, and after being graduated, entered the Union Army as a surgeon attached to a New York regiment.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

Has the amputation of the uvula in males or females anything to do with sterility?

By placing this among your "Queries and Replies" you will greatly oblige
B.

Dr. B. B. G.—Your inquiry is answered by the letters of Drs. O. Neal and Barr on the carbolic acid treatment of piles.

Dr. Alphonso, of Pa.—As an excellent prescription in dyspepsia we give:

R.	Jensen's pepsin,	grs. 192
	Sherry wine,	5viss.
	Glycerin puris,	3iss.
	Acid tartaric,	gr. v.
M.	S.—f. 5j. after meals.	(Gr. iij. to f. 3j.)

Dr. J. G. S., of California, writes to inquire of readers the best treatment for the following case:

"Six months ago I attended a patient in her 'first labor.' She made a good recovery. For the past four months she has had no control over her 'bladder.' 'Incontinence' of urine whenever she stoops over or coughs. The 'walls of the vagina' seem to be completely collapsed and fill up the passage; the 'womb' but slightly prolapsed."

Ans.—Excision of the vaginal walls with a view to promote narrowing by cicatrization would seem to offer a fair hope in such a case.

EDS. MED. AND SURG. REP.—

In reply to Dr. S. W. D., of Virginia, concerning use of carbolic acid, hypodermically, in hemorrhoids.—During the last four years I have used this treatment; also advised and assisted in its use beside my own cases. Result always favorable and permanent, the indication for treatment being an indurated internal ulcer. Frequently, when several are present, the treatment of the largest will relieve the entire trouble. Very little pain follows the application. Let the bowels be moved by light purgatives in morning, and cleansed by injection just before operation. Inject into centre of largest ulcer two or three drops pure carbolic acid; follow with opium suppository, and rest in bed a few days. This treatment has afforded me much more satisfactory results than any other. Respectfully,

D. M. BARR, M. D.

1902 Spring Garden street, Philadelphia, Feb. 18, 1884.

MARRIAGES.

BRACKEN—ROBINSON.—At Rockaway, N. J., February 13, 1884, by the Rev. Albert Erdman, D. D., Henry Martyn Bracken, M. D., L. R. C. S., Edinburgh, of Thompson, Conn., and Emily M. L. Robinson, of Morristown, New Jersey.

DIEHL—LIVINGSTON.—At Hoboken, N. J., Thursday, February 14, 1884, by the Rev. George C. Houghton, Dr. William Diehl, of Philadelphia, to Annie, daughter of I. Menzies Livingston.

GRAY—BARNETT.—At the residence of the bride's parents, in Louisville, January 27, 1884, Dr. D. A. Gray, of Little Rock, Ark., and Miss Isora E. Barnett.

HENSCHEL—KNOEDLER.—At the residence of the bride's mother, in New York, on Tuesday, February 5, 1884, by the Rev. Father Ducey, Edward K. Henschel, M. D., and Marie Leonie, daughter of the late M. Knoedler.

KING—CLIFTON.—At the residence of the bride's parents, 1427 North 12th St., this city, on Wednesday evening, February 13, 1884, by the Rev. Jos. D. Newlin, Dr. William R. King, of Washington, D. C., and Miss Helen P. Clifton.

MATHERS—MILLER.—At the residence of the bride's sister, Park avenue, Walnut Hills, Cincinnati, Ohio, February 14, 1884, by the Rev. Jas. Stanley, T. H. Mathers, M. D., of New Westminster, British Columbia, and Ida May, second daughter of Wm. Miller, Esq., Cincinnati.

SHIPLEY—TABOR.—At the home of the bride, February 3, 1884, Dr. Henry T. Shipley, of Lisbon, Dakota, and Miss Mary Jennett Tabor, of Frederickstown, O.

STEANS—FOSTER.—In Millinburg, Pa., February 5, 1884, by Rev. W. I. Steans, assisted by the Rev. Isaac Grier, D. D., John Charlton Steans, M. D., and Elsie Chambers Foster.

DEATHS.

BRODHEAD.—At his hotel in Waynesboro, Burke county, Georgia, February 6, 1884, Dr. Cicero Brodhead, of Delaware Water Gap, Pa.

EVANS.—In this city, February 9, 1884, Dr. J. R. Evans, aged fifty-seven years.

KENDRICK.—In New York, after a short illness, Dr. Thomas C. Kendrick, in the fifty-sixth year of his age.

WATTLES.—In this city, February 12, 1884, George H. Wattles, M. D., aged thirty years.

THE MEDICAL AND SURGICAL REPORTER.

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PHILADELPHIA, MARCH 8, 1884.

[Vol. L.—No. 10.]

ORIGINAL DEPARTMENT.

LECTURE.

CLINICAL LECTURE ON DELIRIUM TREMENS.

Translation from Dr. Benjamin Ball's work on "Mental Disease" (Paris, France), by Dr. Adele Gleason.

There is a pathological state situated, as it were, on the frontier of acute alcoholism and chronic alcoholism, and which resembles a bridge passing between the two great phases of alcoholic intoxication. It is delirium tremens, or trembling delirium—a grave affection, and one which seems to bear the same relation to ordinary alcoholism, that of aggravation, which acute delirium bears to the maniacal state.

Gentlemen, from the earliest times in medical history, drunkards have been cared for, and cases of delirium tremens have been observed. Hippocrates has certainly reported examples; Aristotle seems to have described the symptoms in Denis, of Syracuse, who had a bout of drinking lasting twenty-four days (a truly royal orgie). In fact, our predecessors of the last two centuries have left us observations which evidently relate to it. And nevertheless, the name is of recent date, and it is scarcely sixty years since the existence of an acute disease, offering a special pathology, has been recognized, and its origin established in alcoholic impregnation.

It was in 1813; the wars of Napoleon were in full activity, and contraband goods coming to the shores of England and to the nearer of the continental shores, and especially in the county of Kent were there enormous quantities of foreign alcohols. The maritime population of these par-

ishes abused, consequently, the use of all the strong liquors, that they contributed to introduce into the country. Then it was that Sutton, who practiced medicine in those parishes, was struck by seeing that there existed among these people, and especially with the sailors, a sort of fever, accompanied by trembling, which was cured by opium, but aggravated by bleeding. To this special form of mania, he gave the name of *delirium tremens*, without attaching directly to these attacks the abuse of alcoholic liquors as a cause, as it is only aside from the work of Sutton that delirium tremens has been recognized as a thing by itself, as a special disease.

Six years later, Rayer published a memoir in which he traced those attacks to their real cause, and made the word *oinomania*, which has not survived.

We come, then, to the works of Blake, Ware, Copeland, Calmiel, and several other authors, who make known the nature and symptoms of this affection.

In 1826, Dupuytren pointed out the nervous delirium of the wounded and those operated upon, which he regarded as a special state. We know to-day that these are simply cases of delirium with trembling, developed by an accident or wound in subjects addicted to the abuse of alcoholic liquors.

Finally, Gubler, and more recently MM. Motet and Magnan, have studied this question with great care, and it is to be found reviewed in the great medical encyclopedias published in France and Germany.

In our day it is invariably admitted that delir-

ium tremens is produced a *potu nimio*, or rather a *potu suspensio*.

But we may ask ourselves whether the alcohol is always of necessity the point of departure. Opium and prolonged intellectual exertion, have been accused, especially in young girls. Such, at least, is the result of the observations of Johnsen. But we should be very cautious in such cases, above all in the case of young Englishwomen; for alcoholism, little known with us among the women of the upper classes, is often met with in the best English society, the members of which have often in their bureau drawers a secret consolation, to which they have recourse in all the afflictions of life.

Let us cite on this point an observation of Rayer to how great a degree we must distrust appearances: A cook had been all day employed in cleaning out a bureau in which several bottles of cognac and kirsch had been overturned. Following this work she was taken with an attack of delirium tremens, which was attributed to the vapor of alcohol, for the sobriety of this woman was vouched for. But a week later she had a second attack, and this time they thought she must be dismissed. Some days later she was found dead drunk in the street. It is then perfectly allowable in practice to distrust appearances.

Following this rule, one is rarely deceived, if using the greatest care in observation. We will leave aside from this lecture all the cases, more or less authentic, which are not related to alcoholism, and we will occupy ourselves exclusively with those which recognize as their origin the intervention of this toxic agent. But at the threshold of the question, one of the most important distinctions becomes obligatory, and dominates the entire history of the disease.

The habitual use of fermented liquors causes a special predisposition, and in subjects this predisposed delirium may break out, either on the occasion of an unexpected accident, or from the suppression of the usual excitant. Hence, we must include among the causes of delirium tremens all those acute affections which may happen to alcoholics, more especially wounds, pneumonia, pleurisy, acute articular rheumatism, typhoid fever, scarlatina, and erysipelas, especially of the scalp. We must add to these the greater part of the causes of enfeeblement, such as inanition, suppuration, and even blenorrhagia, intellectual work, prolonged watching, venereal excesses, and keen moral emotions. Bennett, quoted by Tweedie, reports the case of a young man who, discarded by his father on account of bad conduct, was

seized almost immediately by an attack of delirium tremens.

Such is incontestably one of the etiological forms of the disease: the gun is loaded, it is fired, but not by itself—there must be a shock to determine a discharge.

There is another etiological form in which alcohol itself is not sufficient. It is met with in all those men who are habitual tipplers, but so with discretion and without great cause for scandal; it is also met with among workmen who labor in courts where the atmosphere is charged with alcoholic vapors. In short, delirium may break out abruptly as a consequence of an orgie.

We must add, after the causes, certain general predispositions.

Let us cite age first. With men it is mostly from thirty to fifty years of age that the disorder breaks out. With women it is generally at the time of the menopause, the time in which alcoholic tastes usually develop.

The influence of the season is also to be noted. The heats of summer appear to be specially favorable. The enfeeblement of the general health appears to create an equally baneful predisposition in this respect.

But one of the principal factors is incontestably heredity. The descendants of alcoholics are always specially inclined to commit excesses, the consequences of which are not well born. There exists on this head a very marked difference in human races. Thus it is that in the extremes of Africa, the Hottentots, drunkards *par excellence*, are rapidly enfeebled by the use of alcohol. The Caffres and the Zulus resist much better. They also become intoxicated when they have occasion; but they are of a superior race, full of energy and intelligence and military qualities. We hence understand how they resist the effects of a poison which triumphs easily over inferior organizations.

There remains finally the influence of the suppression of the stimulation. Pointed out by Cumming and Blake, it has been controverted by Laycock and Anstie, but it is to-day universally admitted.

These etiological points once established, let us look at the evolution of the disease. These attacks are almost always announced by prodromi.

Delirium tremens has doubtless been seen to break out even in the course of a prolonged orgie, but it is well known that the first manifestation of the disease is precisely dipsomania, the desire for intoxication.

Thus it often happens that the debauch is an

effect, and not a cause. Cumming reports the saying of a young girl, who said of her father: "We always have warning when an attack is coming on, for he begins to drink and becomes ugly."

Among the prodromi of the attack some are physical and some psychological. Among the former, we cite, first, gastric troubles, pericardial distress, cephalalgia, vertigo, excessive perspiration, slight tremulousness of the hands and tongue, accompanied, sometimes, by a certain embarrassment in speech; and sensorial disorders, such as hyperæsthesia, and even hallucinations of sight. Finally, sleep is troubled, and if the patient escapes insomnia, he has nightmares and terrifying dreams.

The instability of character and nervous uneasiness are the principal psychical troubles that are observed at this period. There is often a profound moral depression, associated with a vague terror, of which the patient can not give the cause.

This painful state may last from a week to a fortnight; but at last delirium breaks out, and as the first and principal symptom, it presents absolute insomnia.

The physiognomy of the patient, much disturbed, indicates clearly enough the disorder of the mind; the laggard eyes, the wrinkled features, the expression of terror upon the whole face: he comes and goes, is agitated, and gives contradictory orders.

A psycho-sensorial phenomenon of the highest importance is added to these diverse troubles: there are hallucinations. They relate more especially to sight; the patient perceives climbing figures, fantastic objects, and above all, animals of all kinds and all grades. Sometimes, also, but less often, he experiences hallucinations of hearing and of touch. A patient, recently in the clinic, saw himself pursued, in his delirium, by flies, who stung him cruelly.

Hallucinations of sight, with alcoholics, predominate in obscurity; they are more marked at night than in the daytime, and even during convalescence, at the time when they seem to fade away, they reappear often when the patient closes his eyes.

Another characteristic of hallucinations in the alcoholic, is that they are almost always aggressive. The personages which surround them seem to menace them; dogs show their teeth, rats would bite them, flies sting them; and these intellectual phenomena are marvelously well united with creeping sensations, with burning and pains which they feel in the skin.

Another accident very frequent with all the insane, is well shown in this form of delirium; it is the fear of being poisoned, from whence often comes the obstinate sitophobia that is presented by some of these patients.

(To be Continued.)

COMMUNICATIONS.

BLOOD-LETTING IN THE OLD.

BY HIRAM CORSON, M. D.,
Of Conshohocken, Pa.

(Continued from page 262.)

On the 8th of June, E. S., aged 77, consulted me on the propriety of his being bled. The doctor in his neighborhood would not bleed any one. He complained that he could not sleep well; had an unpleasant feeling in his chest, was very costive, had flying pains through his body, and could not make much exertion for more than a few minutes at a time. His heart was beating irregularly—a few regular beats, then a pause, then several quick, rapid beats, or perhaps a renewal of the usual beats, with a pretty strong impulse against the ribs, but with no valvular difficulty. Some persons who are favorable to bleeding healthy people, are greatly afraid to bleed those whose heart now and then loses a beat, or has now and then fluttering, as they call it; but as I have often seen such persons bear the loss of blood very well, I did not hesitate here, as he had already tried purging and other home remedies. I bled him pretty freely, and he expressed himself as feeling easier in the chest. I stayed twenty minutes or more, and when I left he walked out with me to the carriage, and said he thought he felt better. He has since been much better than before his loss of blood. This irregularity of the pulse is regarded by many physicians as a condition which forbids the loss of blood, though there be serious disease elsewhere which might be relieved by bleeding or cups. I may therefore say here that I have frequently bled persons whom I knew to have that condition of the heart, without any injury. And two years ago my young friend Dr. Oscar Leedom bled me, then in my seventy-sixth year, moderately, for the relief of a pain over my right eye, which had been increasing for two days. It gave me entire relief in a short time.

The irregular action referred to above—losing a beat, sometimes five or six of them, in a minute, and sometimes not one for hours, or perhaps days

—has been going on with me for many years; and yet I did not fear to be bled, and it relieved me, after bromide of potassium and nervines had failed, and digitalis could promise no relief for many hours, if at all. Why, then, should I have dallied with them, when there was at hand a speedy, safe, efficient remedy?

January 2, 1876, while in attendance at the house of John Rex in Philadelphia county, his mother-in-law told me that she had had for a couple of days a dull, heavy feeling in the forepart of her head, and wished to know if I did not think bleeding would relieve her; that she had been bled frequently, but not during the last several years. I suggested that she take a mild cathartic, and if she should not be better when I should make my next visit, I would bleed her. On the 4th I was there again, and as she had had no relief concluded to bleed her. On pushing up the sleeve of her dress, I found an arm so thin and wasted as surprised me; and on looking at the back of the hands, the skin was so thin and silky-looking, with brown spots and blotches here and there, that I knew at once she must be quite old. Every tendon and vein could be seen almost as plainly as if there had been no skin over them. Every physician of long practice has seen such hands, but never save in very old people. For a moment I was doubtful if I should go on, and on asking her age, she said: "If I live till September I will be ninety-one (91)." This was a surprise to me. She saw it, and immediately said, "I am not too old, am I, to be bled?" "No, it will relieve your head." I thus reasoned the case with myself: Here is a woman who is generally well, but very old, takes but little exercise, and now has symptoms which, in persons of even fewer years, have in thousands of cases heralded the coming of paralysis or apoplexy. What the precise condition of the brain is I do not know; but it may be a local congestion which may be relieved by taking from her arm, while in a sitting position, a few ounces of blood. A few ounces may do, in this old woman what could only be effected in a strong, healthy one by from a pint to a quart. I have so often removed such symptoms, and averted, as I believe, attacks of palsy by a timely bleeding, that I think it much safer to bleed her than to omit it. She was bled nine ounces, without feeling faint. Two days later I was there again, and on asking her how she felt, she said: "I am perfectly well now. I felt it do me good before you left the house." She continued well until last fall, when she died after a brief illness, in her ninety-sixth year. This case will be regarded as

evidence of my recklessness. Let us now suppose that all these cases would have done well without any medication, or, even go further; under treatment by the opponents of blood-letting—those teachers who tell the students that patients have no blood to spare—what then do they prove? That it is a most harmless measure; that people can "spare" a few ounces of blood without danger; and that young men who graduate in medicine without knowing this are unfit to practice medicine, and that their teachers have failed to perform their whole duty.

I may here say that all the persons spoken of here as having been bled from two to six years or more ago are now living, save the one who died in her 96th year. Mrs. Cline is in her 91st year; another in his 78th; myself in my 80th; Mrs. W. in her 68th; Mrs. N. J. in her 71st, and S. G. in his 71st. I might add scores of cases of old people bled by me during a practice extending over fifty-five years, and all with relief, so far as my memory goes. If the testimony of those, even in a single county, who have long practiced, could be published, what an array of proof we would have of the value of blood-letting in saving life in cases of apoplexy, pneumonia, pleurisy, peritonitis, and in averting death in threatened attacks of paralysis in old people.

As this is an important subject, and as in the diseases which I have named and in some others where it is so efficient, the teachers in our two great medical schools are denouncing blood-letting, talking about the blood being the "organ of life" and not a drop should be lost, thus filling the students with dread, I feel that it will be proper to refer your readers to the valuable paper on this subject, written by Dr. Joseph Stubbs, of London Grove, Pa., published in the *REPORTER* of July 8, 1882. Every student of both medical colleges should read it, as should also the students of the Woman's Medical College. Should they do so, we might hope, hereafter, that pneumonia would not sweep off our eminent medical men and other valuable citizens, as it has done for the past few years, under a treatment as much to be feared as the disease itself.

Dr. Stubbs writes: "Second month, 26th, 1881, I was called to see Dr. Ezra Michener, who gave me the following history: 'I am now in my eighty-seventh year. Five days ago I fell on the ice, and sustained a fracture of the humerus near its upper extremity. There was no displacements. and it appeared to be doing well. Last evening I was quite chilly, without sensible cause, had tenderness and aching in submaxil-

lary glands, more marked on the tonsils. On retiring, the signs of the evening had passed away, and were replaced by others of a graver character. I now had pronounced fever, with weight and a burning sensation in the right thorax. The breathing was oppressed and hurried, more so when lying down. These symptoms were persistently aggravated during the night.'

"I found him with a dry, hot skin, pulse frequent and feeble, or rather oppressed, breathing short and oppressed, with pain increased by cough, or attempting to draw a full breath. My diagnosis was pneumonia, to which conclusion he arrived. I said to him: 'Doctor, notwithstanding your views in reference to blood-letting, you would not advise it here on account of your age. You are too old to be bled.' The prompt reply was: 'That must be tried. I do not know that age should make any difference. If I have but a little quantity in store, a proportionate quantity should afford relief, especially now, while in the congestive stage. If thee does not wish to use the lancet, I shall be obliged to use it myself.'

"He was bled while sitting up, and when he drew the first free breath, the blood was stopped. On recurring to the vessel, it was found to contain $\frac{3}{4}$ xv. of blood. . . . I had no case left to report. The disease was *suddenly* and completely aborted, and required no more attention."

Such is an abridged history of the case reported by Dr. Stubbs. And how instructive! A man 85 years of age, with a fracture of the arm of five days' standing, attacked by the disease which has, within a few years, swept away from us a host of our eminent men, all much younger, with an illness of only a few days, their death-beds surrounded by eminent physicians busy in diagnosing the disease, earnest in declaring it *typhoid* pneumonia, and on that account feeling justified in not resorting to that means of relief which has saved thousands from premature death. Typhoid indeed! I know no typhoid pneumonia—never recognize such a disease. What was Doctor Michener's "pulse frequent and feeble, or rather oppressed; breathing short and oppressed"?

Now suppose one of the enlightened physicians of the times had been there, and prescribed one of these "heart tonics," or some one of the now specifics to bring down the pulse, allay the heat, and thin or thicken the blood, as some great German experimenter may have suggested for such a case; what, after this, would have been his situation in a few hours? It would have been one of those cases called typhoid, which they would not expect to cure in so old a man, and

which for them would justify the use of this or that, to see how it would act. Of Dr. Michener's case, Dr. Stubbs says:

"It presents three striking features:

"1. A rapid and extensive congestion of the lung.

"2. A high grade of morbid action tending to destruction of important vital tissue.

"3. A sudden and complete arrest of the disease by blood-letting alone."

Let no one fail to read Dr. Stubbs' whole account of his case. In order to have the opinion of Dr. Michener on the subject of bleeding aged people, I wrote to him in relation to it. To-day, December 21, 1883, I received a reply from which I copy the following:

"I have repeatedly used the lancet in persons varying from 75 to 80 years, with equal advantage as in those of younger years. Some of them were cases of bastard pneumonia—*peripneumonia* botha of authors—in which I have found it to afford very prompt relief, showing that the imminent danger of suffocation is caused by congestion of blood in the pulmonary tissues, rather than by serous effusion into the air-cells of the lungs. The latter appears to be a mere sequence of the former.

"While on this subject, I will relate another form of disease in which I have used the lancet most happily under very adverse circumstances, surely, if modern teaching be true. I will give one case. John Mull, an industrious and healthy farmer, who had recently become intemperate—after several days of extreme exposure to wet, cold, and to whisky—returned home sick on the 25th of 3d month, 1829, and went to bed, where he laid without medical attendance or much nursing. On the first of the ensuing month, I was called to him. As I approached the house, his loud, stertorous breathing was quite audible in the public road. I found him profoundly comatose, the extremities cold, stiff, and pulseless; mouth and eyes set wide open; the respiration not more than five or six. I had a year before treated an analogous case, and the result led me to adopt a similar course. While hastening the preparation of more general and warm stimulating appliances, I at once placed the hand and arm in pretty warm water, with active bathing and frictions till it became more warm and supple, and then applied the lancet. A single drop of thick, pitchy, black blood followed the blade; as the frictions were continued, there was another and another at shorter intervals; each successive portion becoming more fluid and less pitchy till it

flowed, a stream of blood. When the blood had reached six ounces, there was a very obvious change in his condition, and at 12 ounces he was quite cognizant, and the bleeding was stopped. I only state the facts of the case, leaving others to draw their own conclusions. Convalescence was speedy and complete.

The other case mentioned scarcely differed save in the name. Such is the report of Dr. Michener, a man of unimpeached truth and integrity, when speaking of things

"All of which he knew,
And part of which he was."

Shall we listen to French and German teachers, of whom we have no knowledge, and shut our ears against Prof. S. D. Gross, Drs. Michener, Atlee, Green, and Benjamin Wilson, our own men, who have spoken to us words of truth and earnestness, in praise of blood-letting as a safe and efficient remedy for that disease which has been recently so fatal in our profession?

COD LIVER OIL AS A SURGICAL DRESSING,

BY J. E. HAINLINE, M. D.,
Of Cantril, Iowa.

Through the columns of your valuable journal I desire to call the attention of the profession to the use of cod liver oil as a surgical dressing.

The knowledge I am about to communicate is based upon actual practical experience, and the oil used the *purest* to be found in the shops.

In 1875 I was consulted by a lady, who told me she had a large tumor in the left mammary gland which was causing her considerable anxiety. Her friends told her it was a cancer, and that she ought to have it attended to at once. After thoroughly examining the tumor I told her it was malignant in its nature, and that the better plan would be to have it removed by the knife. This she concluded to have done. I gave her about two weeks' preparatory treatment, and then, with the aid of my two colleagues, removed the tumor, together with several axillary glands. After securing several small vessels and thoroughly sponging the wound, closed the same with several sutures (silk) and a few small strips of adhesive plaster, after which I applied the simple water dressing, allowing it to remain undisturbed for forty-eight hours. I then removed the dressings, found the wound doing nicely, and then I applied the cod liver oil dressing. This I did once a day, always cleansing the wound first with castile soap and warm soft water. On the sixth day the wound

was torn open by the patient while about half asleep. I had neglected to pinion the hands to prevent her scratching. She said "the place" had been itching terribly, and she had attempted to scratch, and in so doing had torn it. I found there was an opening about three inches long by one and a half wide. This I determined to heal by granulation, and thereby prevent deformity of the breast. The wound was quite deep. After cleansing it thoroughly, I applied the cod liver oil, to which I had previously added a few drops of carbolic acid. The wound healed rapidly, and the granulating process was perfect in every respect. The patient made a rapid recovery, and up to the present writing there has been no return of the disease. The diagnosis was "*encephaloid carcinoma*."

The dressing in this case being a new feature, I determined to examine several surgical works for the purpose of obtaining, if possible, some evidence of its previous use. I did so, and not finding a single instance, I concluded I must surely be the originator.

I addressed Prof. S. D. Gross, and laid the above case before him, at the same time asking him if he had ever used the above-named dressing, or had ever known of its being used by any surgeon.

I received a prompt reply from Dr. Gross, stating that he "had had no experience with cod liver oil as a surgical dressing," but advised me to continue my experiments, noting carefully the results, and report the same.

These experiments embrace a class of cases differing entirely from each other. In every instance the dressing seemed to increase activity, thereby promoting the healing process.

To enumerate and describe all the cases in which I have used this dressing would require too much valuable space in your journal, so I will only mention a few in connection with the one above cited.

In the spring of '76 I excised a scirrhus breast, after which I applied, first, the simple water dressing, allowing it to remain 36 hours, after which I applied the cod liver oil dressing, to which I added daily a few drops of carbolic acid.

The wound healed rapidly, and on the sixteenth day my patient returned to her home, with instructions to report to me at my office once per week, and to apply the dressing as she had seen me do. I also prescribed an alterative mixture to be taken an hour after meals.

When my patient left for her home the wound was nearly healed, and when she returned a week

later, it had entirely closed. Up to this time there has been no return of the disease, and the lady to-day is enjoying pretty good health.

Three years ago I operated upon a young man 23 years of age, for necrosis of the tibia. I removed a large portion of dead bone, and, after scraping the cavity, carefully filled it with surgeon's lint, which had been previously dipped in a solution of corrosive sublimate. This I permitted to remain for 24 hours, when I removed the same, cleansed the cavity thoroughly, and again introduced the lint, this time saturated with the cod liver oil and carbolic acid.

In this case, also, I prescribed an alterative mixture combined with tonics. In no case where I have operated, using the above-named dressing, did there occur a more perfect and rapid recovery than in this particular one.

Desiring to know the condition of my patient at this time, I wrote him and received the following reply:

"In regard to my leg, I will say it has given me no trouble for nearly two years. I have been working at my trade this winter (he is a blacksmith), and have been on my feet a great deal; but my leg has not hurt me, and seems as strong as ever it did."

Thus I might go on citing over a hundred different cases in which the cod-liver oil, with the addition of carbolic acid, was the only dressing applied; but will be content, for the present, with those above mentioned.

In every case I was compelled to note the increased vitality.

My experience with cod liver oil as a surgical dressing has led me to use it exclusively, believing it to be superior to the olive oil generally used.

To those who may desire to test the virtues of this new dressing, let me suggest that they use the *purest article to be found in the market*.

FRACTURE OF THE FEMUR IN CHILDREN.

BY D. B. HOLSBURG, M. D.,
Of Granville, Ill.

Every practitioner is aware of the difficulties attending the treatment of fractures in children, and more particularly those of the femur in its upper third. In adults almost any of the ordinary modes of dressing may give satisfactory results; but in children, who look upon the doctor as a sort of tyrant, and all modes of confinement as punishments, it becomes necessary to combine comfort, adaptability, and control, with what is

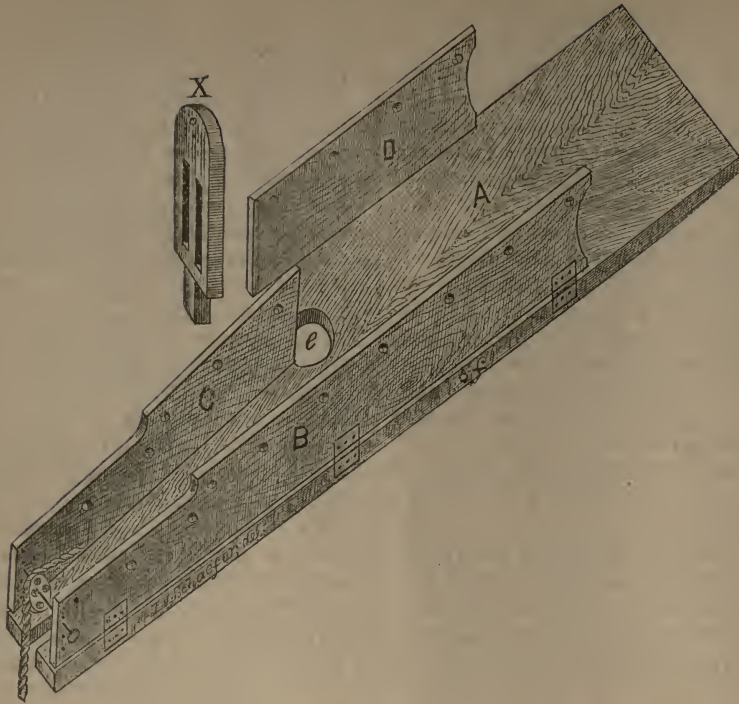
used as the best and safest dressing. The following narrative of a case and the apparatus used in the treatment of it, and others of the same nature, may perhaps be suggestive:

T. K., three years old, child of a farmer, accidentally fell from a two-seated buggy while the vehicle was in motion, and occupied by four persons besides the little unfortunate. The hind wheel, rising from a rut six or eight inches deep, struck the child's thigh as high up as the upper third of the femur, and a severe injury was the result, of course.

I reached the patient's house about three hours after the occurrence, found the child crying violently, the left foot everted, and the seat of injury in a very much swollen and ecchymosed condition. Indeed, so much swollen were the parts that it was impossible to determine whether the fracture was of a simple or comminuted nature. After applying a temporary dressing, and ordering a lotion with lead-water and laudanum, the child was left in care of the parents, to be seen again next morning and a permanent dressing applied.

A ride of seven miles afforded time for thought, and visions of "Cowling's Aphorisms" and plaster of Paris dressing flitted through the mind. An extended modification of the common fracture-box suggested itself as the best apparatus for treating the individual case, and, accordingly, early next morning a mechanic was called on, a rude drawing made, and a box constructed, of which the annexed figure, with perhaps a little explanation, will convey the idea. Next morning found the swelling considerably subsided; a few whiffs of chloroform were administered, and a simple fracture of the upper third of the femur was diagnosed. The next step was to apply plaster of Paris dressing. This done, a soft bed quilt was folded and laid in the box referred to, and our boy deposited and secured therein, taking pains to pack the leg with cotton on the outside of the plaster of Paris dressing, to guard against eversion and inversion. The perineal band was used to prevent slipping down in the box, but applied only when the plaster was partly set, thus causing no inconvenience whatever.

In ten days the boy sat up in the box, which was set on two chairs before a window, and played with his toys, perfectly contented. Even from the first day, he was carried to any part of the house, as well as put to bed, always in his box. At the end of six weeks he was liberated, and removal of the dressing showed good union; no shortening; the foot at a natural angle, and but slight bowing of the bone. The dressings were changed



DESCRIPTION OF BOX.

A is a plain board, even with the patient's head at its wide end, and extending six or eight inches beyond the foot at the other end, for the purpose of extension. *B* is a gate extending from the axilla to the foot end of *A*, to which it is attached with hinges; being perforated with the holes near the upper edge, for the purpose of securing the patient by means of strips of muslin passed to corresponding holes in gate *D*. *C*, also a gate on hinges, and perforated correspondingly with that part of *B* opposite. *D*, a gate on hinges, extending from axilla to offset at *E*, perforated to range with *B* on opposite side. *E*, aperture for chamber vessel. *F*, screw-eye for perineal band. *G*, pulley or spool on wire passed from *B* to *C* for cord with weight. A foot-board, *X*, may or may not be used. The apparatus is best made of poplar wood, as it holds screws better than other light woods.

three times during the treatment; the limb being carefully sponged with lukewarm water each time. It need hardly be mentioned that the uninjured leg was perfectly unconfined, being of course favored with freedom of motion only in so far as the recumbent position and the general situation might allow.

Now, the advantages of such an apparatus are:

1. Simplicity and ease of construction.
2. The persons in attendance can move the patient without risk of displacement of the fractured parts, thus overcoming the monotony of close confinement.
3. The patient can be laid on either side, and thus gain the benefit of change of position and prevent bed-sores.
4. The patient can attend to calls of nature without removing the box or using a bed-pan.

HOSPITAL REPORTS.

BELLEVUE HOSPITAL, JANUARY 5, 1884.

Reported by J. H. WOODWARD, M. D.

(Continued from page 268.)

Case 2. Gun-shot Wound of Thorax—Non-penetrating.

Alexander K—, aged twenty-nine years, admitted to Ward 9, December 21, 1883.

A short time before his admission to the hospital the patient had been shot in his chest. The wound of entrance was found two inches below the right nipple. Another wound was discovered in the areola of the left nipple, through which, the patient stated, some physician had extracted the ball. This wound had been closed with a suture of coarse silk, which was removed at once. After the patient reached the ward, his wound was not probed. There were no signs of injury

to the thoracic viscera. Patient's general condition good.

The wounds of entrance and of exit and their vicinity were washed with $\frac{1}{2000}$ solution of corrosive sublimate. A short drainage tube was placed in the wound of entrance, but none could be passed into the wound of exit without doing some violence to the tissues, and that wound was not drained. Both wounds were finally syringed with the solution of corrosive sublimate; and iodoform was then dusted upon them. Carbolized gauze and borated cotton composed the dressing.

December 22. No temperature. No chest symptoms. Learned that the bullet was a thirty-eight calibre.

December 24. Renewed the dressing, under irrigation with the sublimate solution. Discharge small in amount. General condition normal.

December 26. Removed the drainage tube. No tenderness along the track of the ball. Redressed as before.

December 28. The wound has healed perfectly. A small superficial ulcer remains at the wound of entrance. Covered that with rubber plaster, and discharged the patient cured.

Before giving the details of the following cases of abscess, it will be advisable to describe the surgical treatment which they received, for they were all managed in the same general way. In the first place, the region where the incisions were to be made was shaved and scrubbed with soap and water. It was then washed with ether and a five per cent. solution of carbolic acid; and finally, it was irrigated with a $\frac{1}{2000}$ solution of corrosive sublimate in water. The hands of the operator were cleansed and disinfected with carbolic acid. The syringes and instruments had been rendered thoroughly aseptic, and the drainage tubing had been soaking in $\frac{1}{20}$ carbolic solution for weeks. After the irrigation had been begun, the abscess was opened and the wound was constantly irrigated until iodoform had been sprinkled upon it.

Antiseptic precautions were as carefully observed as if the case were one of amputation through the thigh.

Case 1. Isaac H., age 34, admitted to Ward 8, October 11, 1883.

Patient states that his trouble began three months ago, when he received a blow on the left side of his face. His neck began to swell soon after the injury, and became red and painful. He applied poultices. Examination on admission revealed a large fluctuating tumor of the left side of patient's face and neck. Temperature not taken.

October 12. An incision was made about two inches above the clavicle, at the most dependent part of the abscess, penetrating the deep cervical fascia. Pus in large amount flowed from this wound. The abscess was not washed out. A large rubber drain was passed into the abscess cavity. Iodoform, mineral wool, and borated cotton, comprised the dressing.

October 13. Redressed under the irrigator. The mineral wool had failed to absorb the pus. Iodoform, carbolized gauze, and borated cotton, were used for the dressings.

October 16. Drainage tube removed. Induration much diminished. Redressed as before.

October 18. Removed the dressing and found that there remained only a small ulcer. That was dressed with iodoform and rubber plaster.

October 23. Patient discharged cured.

Case 2. Bernard A., 29 years. Admitted to Ward 10, November 24, 1883.

One week before admission the left side of patient's face began to swell. The swelling was painful, and during the last twenty-four hours patient had suffered from dyspnoea and dysphagia.

November 25. The abscess was opened and a rubber drainage tube inserted. A dressing of iodoform, carbolized gauze, and borated cotton, was applied.

November 27. Redressed the case as before.

December 1. Removed the tube and dressed the case as before.

December 8. Discharged the patient cured.

Case 3. Levi S., admitted to ward 10, December 27, 1883.

No history. He presents a large, red, indurated and fluctuating swelling of the left side of his face and neck. Temperature 102.

December 28. Opened the abscess, inserted a drainage tube, and dressed with iodoform, carbolized gauze, and a saw-dust bag, which had been rendered antiseptic with a solution of carbolic acid in alcohol, $\frac{1}{8}$.

December 30. Redressed. The saw-dust had not possessed any special advantages over the carbolized gauze as an absorbent. Drainage tube removed. Dressed with iodoform, carbolized gauze, and borated cotton.

January 1. Redressed. No discharge. Iodoform and rubber plaster.

January 8. Discharged cured.

Case 4. Patrick L., 47 years, admitted to Ward 10, January 15, 1884.

Patient states that about five weeks ago he had erysipelas in his right foot, and that about five weeks ago a painful, red swelling appeared on the right side of his neck. He was treated with salves, etc., prior to admission.

Examination reveals a red, fluctuating swelling of immense size, on the right side of patient's neck. The swelling begins below the clavicle in front, and extends to the inferior angle of the scapula behind. Patient is very weak, has a high fever, and his skin is wet with a clammy perspiration.

The abscess was opened at a point behind, over the spine of the scapula. The wound was a pretty deep one. Through it about thirty-two ounces of pus flowed, and the abscess was considerably diminished in size. The integument about the clavicular region was quite thin, but it was deemed advisable to allow the abscess to drain through the opening in the back. A large rubber tube was inserted into the abscess cavity. Iodoform, carbolized gauze wet in $\frac{1}{40}$ carbolic solution, and borated cotton, composed the dressing, which was large and thick. It was held in position by carbolized bandages, and over them a rubber bandage was passed to prevent the dressing from slipping. Ordered whisky $\mathfrak{z}$ ss, quiniæ sulph. gr. iij, and tr. ferri chloridi gtt. x.; q. 4 h., day and night.

January 16. Pus has appeared through the dressings. Re-dressed the case under the irrigator. The first dressing was saturated with pus. Iodoform, carbolized gauze, a large disin-

fected saw-dust bag, and borated cotton, comprised the dressing, which was secured by the rubber bandage. Ordered tr. digitalis gtt. x., t. i. d.

January 17. Temperature normal. Patient sweating profusely. Increased the whiskey to $\frac{3}{4}$ j. t. i. d. Opened his bowels with calomel.

January 19. Re-dressed the case as before, and found the dressing saturated with pus. The saw-dust bag had not absorbed the discharges so well as the carbolized gauze. Regular dressing of iodoform, carbolized gauze, and borated cotton applied. Ordered aromatic sulph. acid, gtt. xv., q. 4 h., to check profuse perspiration.

January 20. Patient is better; sweating less profusely.

January 21. Had temporary retention of urine this morning. Increased the dose of the aromatic sulphuric acid to gtt. xxx., and added tr. belladonna gtt. v., t. i. d.

January 22. Discharge through the dressing. Washed the abscess cavity thoroughly with solution of bichloride of mercury $\frac{1}{1000}$, until the water came away clear. Inserted a smaller drain, and dressed the case as before.

January 23. Discharge of serum through the dressing this morning. The soiled spot was dusted with iodoform and covered with borated cotton.

January 29. Removed the drainage-tube, and redressed the case as before, omitting the rubber bandage.

February 1. The abscess had healed completely, and requires no further attention.

Case 4. John D., age 6 years, admitted to Ward 7 on December 31, 1883.

Patient presented a large fluctuating swelling over his trachea. This swelling had begun three days earlier, and had increased rapidly in size until it was quite large. An incision was made over the upper part of the sternum, through the skin and superficial fascia. Through this about eight ounces of curdy pus flowed. A rubber drain was placed in the wound, and the usual antiseptic dressing was then applied.

January 1. Redressed the case as before.

January 4. Redressed again as before. Ordered syr. ferri iodidi and cod-liver oil.

January 10. The abscess has entirely healed, and patient is in much better condition than when admitted. He was under observation for one week longer, but no sign of return of suppuration in his neck having appeared, he was discharged cured.

Case 5. Susie H., aged nineteen months.

The mother stated that the patient had been sick for five weeks, and had been treated for malaria during that period. She had noticed a short time before she brought the child to the hospital that the patient was very tender about the left lumbar region. When presented, the patient was pale and anæmic; and in the left lumbar region there was a tense swelling, in which fluctuation was detected after careful examination. A hypodermic needle was passed into the tumor and the presence of pus demonstrated.

The abscess was opened at once and a large quantity of healthy pus liberated. A rubber drain was used and the usual dressing of iodoform, carbolized gauze, and borated cotton applied.

December 15 and 17. Case dressed.

December 20. The tube was removed.

The case was discharged cured December 28.

Case 6. Mary H., aged twenty-two years, admitted January 7, 1884.

Patient says that her child died three weeks ago, and that soon after her right breast became swollen, red, and painful. She poulticed it. When admitted, her breast was red, indurated, enlarged, and painful. The presence of pus was determined by the introduction of a hypodermic needle. The abscess was situated in the glandular structure.

January 9. An incision was made on the under surface of the breast and carried carefully through the skin and peri-glandular structure until pus was detected. This wound opened a cavity in the substance of the gland, containing about six ounces of pus. A second abscess was located with the hypodermic syringe, and it was opened in a similar manner. This abscess was above the plane of the nipple in the glandular tissue, and contained about eight ounces of pus. The septum between the two abscesses was one-fourth of an inch in thickness; and, although it was deemed desirable to drain the abscess through the lower wound, if possible, the danger of hemorrhage caused the operator to refrain from puncturing the septum. Both cavities were thoroughly washed with $\frac{1}{1000}$ solution of corrosive sublimate. A rubber drain was inserted into each, and iodoform was sprinkled upon the wounds. A large dressing of carbolized gauze wet in $\frac{1}{10}$ carbolic solution, and borated cotton, was applied; and its margins were secured by means of a rubber bandage in addition to the ordinary bandaging. In the evening she had a temperature of $103\frac{1}{2}^{\circ}$. But her temperature fell to normal within an hour after the administration of liq. morphine U. S. P., $\frac{3}{4}$ j.

January 10. Redressed under irrigation. No pus in the dressing. Removed the tube from the lower abscess cavity, and substituted a small tube for the large tube in the upper abscess. Applied the same antiseptic dressing.

January 15. Redressed the case and shortened the tube.

January 18. Redressed the case again and removed the tube. There was no induration about the breast. Patient is allowed to go about the ward.

January 22. The case has healed throughout, with the exception of two small superficial ulcers. There is no induration at any point. The ulcers healed rapidly, and the patient was discharged cured, having been under observation a number of days after the abscesses had healed. The scars were the only evidence that she had ever suffered from disease of the breast.

Chancroids and Bubo—Extirpation of the Inguinal Glands.

Lydia B., age 17, single. Admitted October 22, 1883. When admitted, the patient had large chancroidal ulcers at the posterior commissure of the vulva, and on the labium minorum. The lymphatic glands of the left inguinal region were already enlarged, tender, and painful. The chancroids were canterized with fuming nitric acid and dusted with iodoform. Tincture of

iodine was painted upon the bubo. Ordered two carbolyzed vaginal douches per diem.

November 2. The chancreoids have been cauterized every second day since the last note, with fuming nitric acid, and iodoform has been dusted upon them twice daily. The ulcers are healing, but the bubo is enlarging and suppuration is impending. Substituted for the tr. iodini:

R. Unguent iodini comp.

Unguent belladonna,

aa $\bar{3}$ ss.

S.—To be applied t. i. d.

November 7. Continued the same treatment until to-day. Instead of nitric acid, a solution of carbolic acid one part, in glycerine four parts, is used to cauterize the chancreoids. They are dusted with iodoform as before. The glycerine and carbolic acid are applied once every day.

November 13. The chancreoids are healing satisfactorily. The bubo is increasing. Applied sponge compression to the bubo.

November 16. The bubo is red and very large. It was aspirated with a hypodermic syringe, and pus withdrawn. Fifteen minims of pure carbolic acid were injected at the site of the suppuration.

November 17. Injected $\frac{1}{2}$ gr. of bichloride of mercury and five minims of carbolic acid in glycerine q. s. into various portions of the bubo. The remaining treatment is the same as before.

November 18, 19, and 20. Same treatment continued.

November 21. Aspirated $\bar{3}$ ij. of pus from the bubo, and injected $\frac{1}{2}$ solution of corrosive sublimate. This treatment was repeated, with some apparent improvement in the bubo.

November 27. Injected iodoform gr. xv. into the tumor.

November 29. Repeated the injection of iodoform.

December 1. The bubo is very large, and there are several points of fluctuation. The chancreoids are nearly healed. They are dusted with iodoform twice a day. Stopped all treatment of the bubo by injections, but applied ice to limit the inflammation as much as possible.

December 8. Chancreoids have healed.

December 10. Anesthetized the patient, and Dr. McBurney operated upon the bubo. But before the operation was begun, both inguinal regions and the mons veneris were shaved and scrubbed with soap and water. The left groin was then washed thoroughly with solution of bichloride of mercury $\frac{1}{2000}$. The operation was then begun, and the wound was frequently irrigated with the bichloride solution. It is unnecessary to state, perhaps, that every detail in the antiseptic management of the case was carefully attended to. During the operation several abscesses were opened, and the wound was contaminated with pus. When the glands had been removed, there remained a wound five inches long by three inches broad, which extended down to the fascia covering the deep blood-vessels. This wound was closed with catgut continuous sutures, and a small rubber drain was used to carry off the serous discharge. Iodoform and protectives were applied to the wound, and a dressing composed of carbolyzed gauze and borated cotton were fastened upon the groin by carbolyzed bandages. A rubber bandage was passed over all, to hold the dress-

ing securely in position. The patient was put to bed with the thigh semi-flexed upon her abdomen.

December 17. Changed the dressing for the first time to-day. The wound had united by primary union throughout, excepting at two or three points where there was superficial sloughing of the skin, due to tension. Shortened the drain. Redressed as before.

December 26. Changed the dressing for the second time. The wound is perfectly solid throughout. A small sinus only remains where the drainage tube passed. Inserted a short tube into it to keep the mouth open. Balsam of Peru, carbolyzed gauze, and borated cotton.

January 3. Removed the dressing and found the case had healed perfectly. During the progress of this case, the patient had had no febrile movement after the second day, and her temperature never rose to 101° at any time. The scar is narrow and in the fold of the groin, and is scarcely noticeable. It should be stated that throughout the entire management of the wound in this case the strictest antiseptic precautions were observed.

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Meeting December 5, 1883.

Dr. Charles W. Dulles, Surgical Registrar to the Hospital of the University of Pennsylvania, read a paper entitled,

Criticisms on the Specific Theory of Hydrophobia,

Nearly two years ago I had the painful experience of being summoned one day to take charge of a boy who was suffering with what is called hydrophobia. The unfortunate patient was under my care and observation less than twelve hours, when he died. The horrors of that day can only be understood by those who have had a similar experience. To stand in the presence of such distressing psychical disturbance, to see death advancing relentlessly, to feel that science furnishes no satisfactory explanation of the nature of the disorder, and offers no trustworthy remedy for its treatment—this was a trial of mind which intensified the weariness of body which the circumstances necessarily entailed. The details of the case were read before the West Philadelphia Medical Society, and are recorded in the *Medical News*, May 27, 1882. There can be found all the points which at the time most impressed me. There, too, are recorded the theoretical and practical notions in regard to hydrophobia which I had at that time. Later, on May 23, 1883, I read before the Philadelphia County Medical Society a paper entitled "Remarks on Hydrophobia," which was published in the *Philadelphia Medical Times*, August 11, 1883. In this are set down some of the conclusions which I had reached after more than a year's study of the literature of the subject. The point aimed at in that communication was to attract the attention of those who heard me to the extremely unsatisfactory condition of our knowledge in regard to this disorder, and to lodge in their minds the sus-

picion that the views so ordinarily held, and so positively stated in most of the text-books, are not as clearly established as most people believe. In concluding the discussion which followed in the Society, I stated all I wished to, at that time, of my own convictions, in the expression that "but little of the evidence upon which it (the commonly accepted theory of hydrophobia) rests, can be regarded as having an accuracy and reliability commensurate with the delicateness and gravity of the questions at issue." Since then I have continued my investigations, and the wider their extent has grown the firmer has become my belief that this statement was the very mildest that could have been used without sacrificing the truth. But I have learned by reading, and by experience, that those who differ from the majority are in danger of being treated to a certain amount of disdain, for their inability to accept as evidence what to others seems acceptable enough. For example, Dr. Parry, in his interesting work on *Cases of Tetanus and Rabies Contagiosa*, published in London, 1814, indicates his sentiments as follows: "It was formerly doubted whether any such disease as canine hydrophobia existed; and I have heard that the question was once solemnly debated in a society, which, after a long discussion, determined it in the negative by a majority of voices. The existence of the giraffe or camelopardalis, was long denied by the moderns, not only notwithstanding the accounts given of it by the ancients, and its delineation on the Prænestine pavement, but after its skin was actually to be seen dried and stuffed in a Dutch museum. We are told of a king of Siam, who, after he had heard with patient attention certain wonders from an European ambassador, and was at last informed by him that in this country, at certain seasons of the year, water became solid, and was capable not only of being cut or broken, but of admitting his majesty and his whole court to walk over it without wetting their feet, flew into a violent passion, exclaiming: "For a long while, notwithstanding the prodigies you have related to me, I thought you were an honest man; but now I am sure that you are an impudent liar." In this story, the intimation that our knowledge about hydrophobia has reached the "dried-and-stuffed" stage goes well with the other intimation, that the skeptics in regard to it are in the state of ignorance comparable to that of the king of Siam.

Later than Dr. Parry, but still in this century, Dr. Copland set the stamp of his learning on the doubters thus: "The supposition lately published that there is no such specific disease as rabies, and that it is merely the result of mental anxiety, etc., is only one of the absurdities thrown up on the surface of medical doctrine, and hardly deserves mention, and much less, serious refutation."

But scientific questions are not settled in this summary way, nor has the fear of being thought singular ever long deterred men from asserting what they had come to hold as convictions. That which has been branded as an absurdity has, over and over again in the history of the world, come to be established as a fact; and the same may yet be accomplished for the opinion of those who deny the specific nature of rabies or hydrophobia. One thing is sure, viz., that the attitude of severe

criticism seems to offer the only hope for the solution of the riddle of hydrophobia; since, in more than two thousand years, the acceptance and repetition of authoritative opinions has failed to furnish a theory which does not fly in the face of all analogy, or a practice which holds out a reasonable hope of saving a single life. Such is the real state of knowledge in regard to hydrophobia. The theories as to its nature are contradictory and illogical, the teachings as to its treatment are without the slightest hope of success. In regard to both, the ablest men who have discussed it occasionally or systematically are in irreconcilable opposition. While some hold to certain modes of communication, others strenuously deny them. While some admit its spontaneous origin, others will not admit it for a moment. While some think the virus is to be found in the saliva, the blood, the bronchial mucus, the milk, the flesh of rabid animals, others limit it to the first of these alone. In regard to the period of incubation, the widest divergence of opinion exists. The range is from one day to forty years, and no one seems to have been able to fix a limit to either its shortness or its length. Equal contradiction meets the gaze when one turns to the matter of treatment. From the throwing into a fish-pond, as practiced by Celsus, to the inhalation of oxygen, as recently practiced by Drs. Schmidt and Zebeden, there is a variety of methods which demonstrates how utterly every attempt to find a specific has lacked the guidance of any accurate idea as to the nature of the disorder. To almost any statement of men whose names are highly respected in medicine, may be opposed the most positive and contradictory statements of others equally respected. Virchow admits (*Handb. d. Spec. Path. und Therap.* "Wuthkrankheiten und Wasserscheu") that hydrophobia may be communicated by means of weapons used to kill mad dogs with, and by blood-letting and scarifying instruments—a belief which, but for Virchow's adherence to it, would be correctly designated as obsolete, and which is entirely unworthy of acceptance. Bollinger, a distinguished veterinarian, admits (Ziemssen's *Cyclop.*, art. "Hydrophobia,") the possibility of infection by the migrations of animal parasites, such as fleas and lice.*

The late Dr. Geo. B. Wood admitted the possibility of hydrophobia being caused by the bite of birds, and explains why this does not often occur, as owing to the fact that these animals, like horses, asses, and oxen, do not usually bite (*Practice of Medicine*, vol. i., art. "Hydrophobia"). In view of these facts, it will not seem so remarkable that Savages believed the eyes of hydrophobic patients to shine at night like those of cats, or that he should explain this on "meaque de hydrophobia theoria, quæ admittit in hoc morbo fluidum illud in phosphoricam activitatem exaltatum." (*Nosologia Methodica: Vesanior*, vol. i., p. 232.) Nor can one wonder that Mead, about

*This curious idea is founded upon a reference, which, when I hunted it up, I found to be a pure assumption of Dr. M'Crae (*Lancet*, March 23, 1872, p. 420) that the occurrence of smallpox thirteen miles northeast from Melbourne, where it was also present, was to be accounted for only on the supposition that it was conveyed by flies. It has been interesting to observe, in my own investigations, how this supposition of Dr. M'Crae has grown to a statement of an established fact, as it has been quoted by foreign writers.

a hundred years ago, should have said, "The influence of the moon in these cases, I am convinced, is of some weight." (*Medical Works*, art. "Hydrophobia," p. 62.)

But, to return to modern times, what shall one think of the attempt of Doléris, the author of the, in many respects, admirable article on this subject in the *Nouveau Dictionnaire de Médecine et de Chirurgie* (1881), to explain the assertion of the occurrence of spontaneous cases by saying that the disorder may be acquired from germs distributed in the air and earth, like "charbon"? Or, how shall we consider the willingness of Sir Thomas Watson (*Nineteenth Century Review*, December, 1877), to accept the occurrence of hydrophobia by the infection of sucklings through the medium of mother's milk, or his statement that the disorder does not occur in Constantinople or Africa?—in both which places it does occur.

But I do not wish to make too much of this aspect of the literature of hydrophobia. I wish to call your attention to the cause of the uncertainties which prevail in regard to it. This is, in my opinion, easy to point out. It is the too great readiness to accept any sort of testimony which may be offered as bearing upon the subject. This fault is to be found in almost all the works treating of hydrophobia, from the earliest ages to the present time. This led Pliny to father such absurdities as the following: "There is a small worm in a dog's tongue, known as 'lytta' to the Greeks; if this is removed from the animal while a pup, it will never become mad or lose its appetite. This worm, after being carried thrice round a fire, is given to persons who have been bitten by a mad dog to prevent them from becoming mad. This madness, too, is prevented by eating a cock's brains; but the virtue of these brains lasts for one year only, and no more." And, again, "So virulent is the poison of the mad dog, that its very urine, even if trod upon, is injurious, more particularly if the person has any ulcerous sores about him. The proper remedy in such a case is to apply horse-dung, sprinkled with vinegar, and warmed in a fig." (Pliny, *Natural History*, book xxix., chap. 32. Trans. by Bostock and Riley.) This same too easy acceptance of testimony led such a writer as Dr. Samuel Bardsley, in 1807, to accept the statement that hydrophobia could be communicated by the mere application of the saliva to the unbroken skin, and to cite with apparent approval a story of a man who had hydrophobia from kissing a mad dog previous to its being langed. (Samuel Argent Bardsley, *Med. Reports*, London, 1807.) And, most recently, it has led Bollinger, already referred to, to attribute the disorder to drinking the milk of an affected animal, and to the act of coitus. (*Ziemssen's Cyclopadia*, 1875.) While Mr. Williams, in his valuable work on *Veterinary Medicine*, 3d ed., 1882, says that rabies can be communicated through a "thin epidermis without wound or abrasion."

These citations illustrate the most remarkable feature of the literature of hydrophobia. It would seem as if when once the mind has accepted a theory which contradicts all experience in other and fairly well-understood diseases, it loses the ability to distinguish good evidence from bad. A striking illustration of this is furnished by Dr. Dolan, in his otherwise capital book on

Hydrophobia or Rabies. In his second chapter this writer calls attention in detail to the rules laid down by Dr. Abercrombie, in his *Inquiries concerning the Intellectual Powers and the Investigations of Truth*. These warn against the following fallacies: 1. Receiving as facts statements which are not facts, but opinions. 2. Receiving as facts statements which only assume the relation of facts. 3. Receiving as facts general statements, or the generalization of facts. Dr. Dolan then says: "Some writers, for instance, have maintained with much confidence that a particular state of rigidity of some of the limbs is distinctly characteristic of *ramollissement* of the brain. But further observation has shown that the disease may exist without this symptom, and that this condition of the limbs may appear in connection with other diseases. This observation of facts was in so far correct that this state of limbs does very often accompany *ramollissement* of the brain: the error consisted in giving it as a general fact, or a fact applicable to all cases of *ramollissement*, which is without foundation. Yet such statements, when brought forward with confidence, are often received as facts and rested upon as established principles; and then the facts by which their fallacy might be detected are apt to be overlooked or forgotten." To this reference to the commonest sources of fallacy Dr. Dolan adds: "We are arming our readers against ourselves." And yet he goes on, apparently with his eyes wide open, to reproduce the fault he has just pointed out in speaking of *ramollissement*, accepting statements which ought not to be entertained for a moment in the discussion of so grave and delicate a subject, and admitting as genuine cases which are transparently spurious. I will give an example of this latter mistake, which illustrates several points at once. Dr. Dolan gives in his collection of cases, and, after sifting his material, stamps as true the following from Romberg's *Diseases of the Nervous System*:

"Case 74. Frederick L., male, æt. 6, bitten on the second finger of the left hand by a dog which had already bitten several other children. Result and time of attack, three months; fatal third day.

"*Treatment*.—A few of the dog's hairs had been cut off to place upon the wound, which in eight days was completely healed. The treatment consisted in taking twelve ounces of blood from the arm, scarifying and applying cantharides ointment to the cicatrix, rubbing in a scruple of mercurial ointment into the inner surface of the left arm. Dr. Horn also visited the boy, and described his features as expressive of extreme anxiety, while his eyes told a tale of immeasurable misery. He implored that he might not be touched or bled again, as he desired nothing more than to be allowed perfect rest."

The post-mortem was made on the 4th of September, 1820, twenty-five hours after death. The smell of putrefaction was already developed. The muscles were dark red. The lungs were charged with blood. The larynx, the trachea and œsophagus were not abnormal in appearance. But, the record says, "the redness of the heart was remarkable, the arteries and veins on its surface looking as if they had been injected. The mitral and aortic valves presented a scarlet hue, the trabeculæ carneæ were darker than usual, the in-

ternal surface of the aorta was of a bright red hue as far as the arch; the blood contained in the vessels was dark and fluid; the inner surface of the stomach was as pale as that of the œsophagus. No morbid change was found in any other abdominal organ. At the urgent request of the parents, the head was not examined."

The history of this case as originally described in Romberg's book (*Nervous Diseases*, translation: London, 1853), taken together with the post-mortem appearances, seems to me to show it to have been one of acute endocarditis, probably septicæmic. But no such idea seems to have entered the heads of the physicians who attended it. As a case of hydrophobia, they went most heroically to work to treat it.

Picture to yourselves the scene. Think of that little child, only six years old, tested with the useless and dangerous tests of handwashing, and mirror, and with urine sprinkled on his skin—the former showing nothing, the latter causing a paroxysm. Think of his being bled, the cicatrix being scarified and blistered with cantharides, and mercurial ointment being rubbed into his arm. Then fancy him, when the doctors came at him after an interval, imploring only to be left in peace, whilst they, with grim determination, bled him again, and dosed him with calomel, after which—to quote Romberg literally—"death came to his relief."

In reporting this as a case of hydrophobia, Dr. Dolan has followed the opinion of Romberg, who when he recorded it had *never before seen a case*. But it strikes me as a very piteous illustration of the truth of what White said (*Doubts of Hydrophobia*, London, 1826,) of the course of many cases. He described the usual alarm, the fear of the patient, the suspicion of the doctor, the test with water, the melancholy conviction of doctor and patient, adding: "The patient and himself, therefore, will soon *make out a case*—the one dies, and the other publishes an account of his end." Does it seem unfair to apply such an expression to such a case as has just been cited? On the contrary, does not the history of the case indicate that general eminence in medical science gives no guarantee of infallibility when this vexed subject is approached?

I have selected an illustration of the point I wished to make, which should include two names well known and justly distinguished, because their very excellencies add force to the proof they furnish that the prepossession of a theory which at the outset demands a certain surrender of the judgment, will impair the freedom of the judgment at every subsequent step. Such it seems to me is the condition in which every believer in the specific nature of hydrophobia stands. The assumption of a specific virus which, and which alone, is the originator of the disease in any individual, compels its adherents to bend their judgment to accept the belief that there is a virus which behaves in a way contradictory to that of every other virus about which we have any positive knowledge. As Lorinser has said (*Wien. Med. Wochenschrift*, 1874): "We know very well the appearances produced, for example, by the bite of poisonous serpents, or by the poisoning of wounds with the poison of glanders, anthrax, syphilis, or cadaveric poison. There are, in general, always

the manifestations of more or less rapidly developed inflammation, and of further distribution of the poison through the lymphatics, veins and lymphatic glands, which organs then, in like manner, manifest similar inflammatory symptoms. Nothing of the kind do we see in wounds made by the bites of mad dogs," etc. And, again: "We know, in all pathology, not a single infective disease, which, in regard to the time and symptoms of development, bears the slightest resemblance to hydrophobia."

One might suppose that such a contradiction would lead observers to be constantly on the look-out to find some other way of explaining the phenomena of hydrophobia, and that everything that was presented as evidence in support of it would be subjected to the most rigid scrutiny. But the literature of the subject shows that the very opposite is the case. The *post hoc propter hoc* argument is the one which rules here. A careful perusal of a large number of recorded cases leaves the impression that they have not been studied with any idea that they might be something else than what they appeared to be. Though it is no secret that the dread of water is a symptom of a great variety of affections, one finds over and over again the ablest men resting a diagnosis on this which is acknowledged by most systematic writers to be the least reliable of its signs. Another thing which struck me in examining the records of cases is the readiness with which reporters, aware of the objection so often raised, of the effect of mental influence, accept the statements of friends or the silence of patients in regard to it as evidence that it does not exist. I will give an example of this. In the *Berliner Klin. Wochenschrift*, September 15, 1879, Dr. Findeisen reports a case of a man who died of hydrophobia, and who is positively stated not to have known that the dog that bit him was mad, or to suspect that he had hydrophobia, or connect his disease with the bite. Yet the record states that, on the second day of his disorder, he cried out that he had been bitten by the "poisonous (*giftiger*) dog," and was not crazy.

(To be continued.)

Lying-in Room Hints.

A very good article on this subject by Henry F. Walker is published in the *Med. Record*, February 23, 1884. The points which he wishes to emphasize are:

1. Examine every woman immediately after delivery, and if there is any laceration, even a trifling one, close at once with silk sutures.
2. Examine every woman when she begins to move about, and if there be displacement of any kind, anteversion, retroversion, or prolapsus, introduce a proper pessary, with the hope that its temporary use during the period of involution will establish a cure.
3. Examine at birth every male infant, and if the prepuce be so contracted or adherent that, with probe and pressure, the glans penis cannot be uncovered, operate by splitting the prepuce as far back as the corona with scissors or bistoury; the chosen time for operation, unless urgent symptoms present themselves, being the ninth day.

EDITORIAL DEPARTMENT.

PERISCOPE.

A Case of Actinomycosis. *following*

Dr. W. Knight Treves reports this case in the *Lancet*, January 19, 1884:-

P. C., aged 45, was admitted to hospital August 17, 1883, supposed to be suffering from a scrofulous affection of the glands of the neck. He is a muscular man with a good family history. His illness began sixteen months before admission, with inflammation about the neck and angles of the jaw, which however only kept him from work for two or three days. He has lived well, and never had cattle to look after. A lump by the angle of the jaw followed the inflammation, which was incised. Subsequently other swellings formed. Over the angle of the jaw, and in the posterior triangle of the neck were three ulcerated and fungating surfaces, those by the angle of the jaw being about one inch and that in the posterior triangle about two inches in diameter. There



were tumors over the collar bone, the second rib, and the fourth costal cartilage near the sternum, each of which was in a direct line, and had followed in regular order the one described as existing in the posterior triangle. These tumors resemble each other in appearance; they are smooth and evenly formed, and are in shape as nearly as possible a half a sphere; the upper one is two inches in diameter, the lower one an inch, and the middle one intermediate in size; they have an elastic, semi-fluctuating feel; the skin over the

upper one is thin, red, and evidently about to give way; the skin of the middle one is also discolored; that of the lowest is normal. To the right and left of these tumors are two nodules about the size of a marble, apparently the same thing in process of formation. The discharge was thin and serous, and contained minute yellowish masses, and disintegrated tissue, and had a peculiarly offensive and sour smell. The patient declined operative interference. He remained in the hospital till December 7, the progress of the case being gradual loss of flesh, formation of lumps on the other side of the neck, and in the axilla. The three tumors described became broken down, and he presented before his discharge the appearance given in the woodcut, which is from a photograph. The appearance of these tumors resembled nothing that I had ever seen before. The case was certainly not scrofulous, nor was it like any new growth with which I was familiar. I arrived at the conclusion that it was an example of the disease known as actinomycosis. This diagnosis was confirmed by the discovery under the microscope of bodies which I believed to resemble the fungus described as peculiar to this disease. So far as I can ascertain, this is the first case of actinomycosis described in this country.

Castration for Uterine Fibroids.

We learn from the *Edinburgh Med. Jour.*, January 1884, that at a meeting of the German Science Association, Wiedow, of Freiburg, opened a discussion on this subject. He suggested that the operation was now thought too little of, because at first it was taken up with too great enthusiasm, and tried in unsuitable cases. He collected 63 reported cases, of which 12 had been fatal. In one of Hegar's cases there was a temporary improvement after operation, lasting about six months, followed by increased growth and a return of the hemorrhage. The patient died a few months subsequently, when the tumor was found to be fibro-cystic and to contain purulent serum. In this case, as in a similar one reported by Schröder, the tumor was enormous (kolossal). For such cases the writer would give an unfavorable prognosis. Hegar had operated 21 times with 3 deaths. Of the 18 non-fatal cases 1 terminated as above, while in 17 the result of operation was very satisfactory. Sooner or later the menopause, with shrinking of the tumor, occurred. The writer then showed drawings of Hegar's cases before and after operation, and submitted 4 of the cases for examination. Freund, of Strassburg, reported 6 cases in which he had operated. All had lived, and in five there had been shrinking of the tumors and cessation of the bleeding. In 1 there had been no improvement. In this case the tumor was "kolossal." Hofmeier, of Berlin, asked what were the indications for castration as opposed to removal of the tumor. Hegar, of Freiburg, said that the size was not the only point that would guide one in answering

this question. As regards the danger of the two operations, he said that on an average that of castration was the lesser, though this was not invariably the case. He always had instruments at hand to remove the tumor if advisable, when he undertook castration for fibroids. If he found a well-developed pedicle, he removed the tumor. He regarded castration as a very efficient operation, and thought it should be recommended before the tumor had acquired great size. Kaltenbach, of Giessen, drew attention to the fact that occasionally the ovaries were situated on the apparent posterior aspect of the tumor, and that thus great difficulty might be occasioned. He reported two successful and satisfactory cases of his own, but drew attention to the fact that removal of the ovaries did not always result in the menopause. Badleiner referred to two cases where decided diminution of the tumors occurred after the natural menopause. Müller, of Berne, had operated in 6 cases, with 1 death and 1 uncompleted operation. In the remaining 4 the result was satisfactory. He regarded castration merely as a resource, and looked on extirpation of the tumor as the ideal operation. Hegar remarked that he had seen fibroids suddenly begin to grow and become cystic after the natural menopause, even in cases where there had occurred some shrinking, just as had been mentioned in the discussion as having followed the anticipated menopause. In all those cases the tumors had been very large, and he would therefore regard the prognosis of castration for very large tumors as doubtful.

Neuralgia of Bone.

In the *London Med. Times*, January 19, 1884, Dr. J. Matthews Duncan says:

When a bone of the pelvis has been injured, the part, sometimes after complete recovery so far as manipulative examination is concerned, retains a morbid sensitiveness or weakness. It is not swollen; but it is liable to ache severely or be painful. Cases of this kind in bones of the limbs I have known to be successfully treated by laying the bone bare by knife, raising the periosteum, and gouging or chiselling off the surface of the affected part. In my cases I have not resorted to this, and I may best and most briefly tell you all I know of the matter by giving a few details of two.

A fine, healthy young woman had a first labor, managed by a skillful accoucheur, natural in all respects, except that delivery was completed by short forceps. At the time of delivery nothing special was noted as to wounding; but the patient felt a deal of pain in the private parts, on the left side, during all her recovery. She got up, however, and was well and strong; but as soon as she began to walk, the pain in the left labium recurred, and was increased in severity as she increased the use of her legs. The pain was now ascribed to weakness, now to falling of the womb, now to ulceration, and was treated accordingly, but with no good effect. Careful local investigation discovered the labium to be internally cleft, and the deepest part of the cleft quite healed, healthy looking, but adhering to the descending ramus of the pubes. The bone was scarcely tender, but whenever it was touched, the patient at

once, and again in subsequent examinations, declared that that, and that alone, was the seat of pain. The bone was occasionally tender after great exertion, as in dancing: it was always and exclusively the seat of the aching pain. The labium had been cut by the anterior margin of the left blade of the forceps, and healing had taken place with adhesion of the cervix to the adjacent bone. Complete satisfaction as to the seat and nature of the disease was half the cure. Avoidance of long walks and of much dancing, hot bathing at bedtime, tonics, iodide of potassium, were all used, and did not bring quick relief. It was not till these cures had been continued more than a year that the whole matter was forgotten. Now she never feels it.

A middle-aged woman, a clergyman's wife, was thrown out of a little pony phaeton, and fell on her sacrum. After the accident she had continued pain in it for a long time; and the pain recurred after intervals of health varying in length. When it came, she felt the part to be a little tender, but not swollen. Latterly, after some years, she was led to believe that now her suffering was not from the injury, but from disease of the womb. Then she consulted me, and it was very easy to make out that the pain was in the bone, exactly where the injury had been inflicted. There was no uterine disease, and the conclusion was inevitable that the case was one of neuralgia consequent on mechanical injury. With assurance on this point she was quite satisfied, and went away with some directions as to treatment when the aching came on.

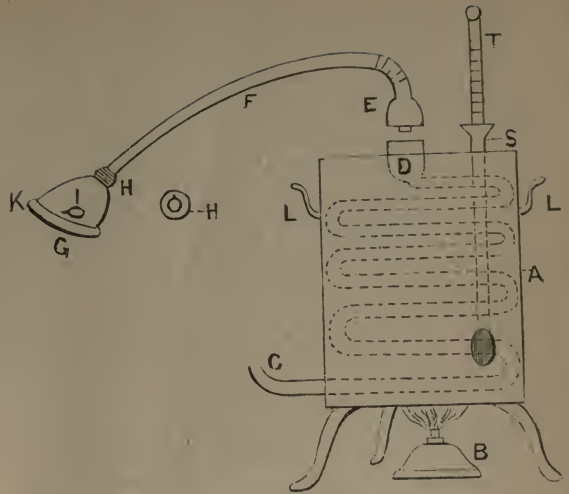
Perhaps this disease should be called chronic ostitis, not neuralgia: I do not here attempt to decide.

Antiseptic Inhalation.

Dr. L. E. K. Shuttleworth writes to the *Lancet*, January 5, 1884, from San Remo, Italy, as follows: In the present state of our knowledge of the bacilli of tubercle and of the action or inaction of antiseptic inhalations, I believe all observations are of value to the profession. I therefore venture to send you a few lines, recording my experience of the action of antiseptic inhalations as ordinarily used, from observations taken, thanks to the kindness of my colleagues here, Dr. Daubeny and Dr. Freeman, in typical cases under their care, as well as under my own care, and also a few lines descriptive of the results of experiments I have made on the vaporization of carbolic acid and a description and drawing of an apparatus I have had constructed, by means of which I believe carbolic acid and other disinfectants may be much more thoroughly vaporized and inhaled than by any ordinary method.

During last winter I examined constantly the sputa of patients under the care of Drs. Daubeny, Freeman, and myself, in which the bacilli had been demonstrated, and I was much struck with the fact that in the great majority of cases where carbolic inhalations were used with an oro-nasal inhaler in sufficient quantity, a great diminution in the number of bacilli took place; and that, though from time to time fresh crops appeared, these, when the inhalations were continued, regularly but gradually diminished both in frequency

of occurrence and in the relative number of bacilli. But I was also struck with the difficulty in persuading patients to inhale efficiently—i. e., to apply the inhaler so as to exclude all uncarbolized air, and in many cases also they did not at first inhale freely, and the carbolic acid, being not very readily vaporized, is not taken up from an ordinary inhaler unless the respirations are fairly deep and strong. I therefore considered, How can carbolic acid be effectually vaporized? And during the summer months made the following experiments, with the kind assistance of Mr. Gurnell, the well-known chemist at Ryde. I exposed fifteen minims of carbolic acid to the air of an ordinary room in a watch glass; at the end of twenty-four hours the weight was not perceptibly altered. Next I exposed fifteen minims in a watch glass to a heat kept as nearly as possible to 170°F. , in a water oven; the result being that at the expiration of five hours, during which the temperature had never exceeded 170° , or been below 150° , no trace of carbolic acid could be found in the watch glass. Next I tried with a temperature ranging from 200° to 212°F. , and found my carbolic acid had entirely disappeared in two hours. My next idea was to pass all the air inspired (1) through eight or nine feet of metal tubing heated to any temperature required; (2) through the carbolic acid also heated, and (3) through a proper oro-nasal mouthpiece. For this purpose I had an instrument constructed consisting of nine feet of metal tubing coiled inside a tin boiler, the afferent end being open to the air, and the efferent expanded into a small chamber, closed by a hollow plug of metal, in the interior of which tow could be placed to receive the carbolic or other disinfectant, and which was connected with an ordinary oro-nasal mouthpiece properly padded by a large india rubber tube. I then placed 13 grains of carbolic acid on 8 grains of dry tow, making a total weight of 21 grains, and placed this in the hollow plug. After ten minutes' inhalation the total weight was reduced to 13 grains; after twenty minutes, including the time occupied with the first weighing, to 8 grains +, after thirty minutes to 8 grains —, showing, as I believe, that the total amount of carbolic acid was completely vaporized in about twenty minutes, and from my sensations of tingling lips, sore nose and throat, pain in the chest, and slight vertigo, with exhilaration of spirits, I believe faster than desirable for ordinary inhalation. The temperature of the water in the boiler ranges from 170° at the commencement to 198°F. at the termination; a slightly lower temperature causes the vaporization of the carbolic to be more gradual, and I venture to claim for this system that by it carbolic acid and many other antiseptics can be perfectly vaporized in hot dry air, the heat and dryness being of themselves beneficial, and that the apparatus can be used at the patient's own home, and is not expensive. Mine, made by a working tinsmith, cost less than five dollars.



A, Cylindrical boiler, made of tin, 8 in. by 6 in., supported by three legs, closed except at S, over a spirit-lamp (B). C, The afferent end of the air tube, which enters the boiler at the side and is coiled round within it, 90 in. of metal tubing having an internal diameter of $\frac{1}{2}$ in., being disposed in the cylinder. D, The efferent extremity of the tube, ending in a small cylindrical expansion, which receives the hollow plug (E), having an internal diameter of $1\frac{1}{2}$ in., and a depth of 1 in., in which the dry tow to receive the antiseptic substance is placed, and which is connected with the mouthpiece (G) by an India rubber tube (F), having an internal diameter of $\frac{3}{4}$ in. and a length of 18 in. G, The mouthpiece, with three valves. I, A small one on each side to give exit to the expired air. H, A larger one to admit the heated antiseptic air and prevent the return of expired air. K, An India rubber air-pad round the mouthpiece, which covers both nose and mouth. L, L, Handles for lifting the cylinder. S, A small funnel, through which the boiler (A) is filled, and the thermometer (T) introduced. (The drawing is one-tenth the actual size of the apparatus.)

Electrolysis in the Treatment of Dracunculus.

Dr. Alexander S. Faulkner thus writes in the *Brit. Med. Jour.*, December 29, 1883:

O. L., a Hindu goldsmith from Kattyawar, aged 28, was admitted into the Civil Hospital, Aden, on July 25th last, suffering from the effects of the presence of four Guinea-worms in different parts of his body.

The patient, though a slight man, was fairly nourished, and his general constitution and functions did not seem much impaired. The different positions of the several worms were as follows; About the upper third of the outer aspect of the right leg, a worm had protruded about three inches; on the lower third of the outer side of the left thigh, another had also protruded to the extent of about two inches; on the dorsum of the left foot, he had a fistulous opening, indicating the site where a worm appeared, but was broken off in the patient's endeavors to extract it, but the remaining portion of the worm could be distinctly felt in the surrounding subcutaneous tissues; and on the back of the left hand, especially between the little and ring fingers, another worm could not only be felt, but its tortuous course was distinctly visible, but, so far, its presence caused no inflammation, and, consequently, there was no apparent indication of the site of its intended exit.

The patient had only been in Aden for three months, having previously resided at Kattyawar, in India (a district where this disease is of very

common occurrence). The first indication he noticed of his present condition was a "swelling" on the outer aspect of the left thigh, which resulted in an abscess, and subsequently burst, discharging a good deal of pus, and the head of a Guinea-worm. In trying, by forcible traction, to extract the latter, the worm naturally broke, its greater portion remaining within. Subsequently, other abscesses formed, in like manner, in different parts of his body, caused in each case by the presence of a Guinea-worm, all of which were treated by the patient by extracting only portions of a worm at a time. In this way, he stated, he had been suffering for the last five years.

On presenting himself for treatment at the Civil Hospital, I determined to try the experiment of applying galvanism to the protruded worms, an idea I have for some time wished to test practically. The result in this case was most encouraging and satisfactory. The patient held one pole of the battery in one of his hands, and the other I applied to the head of the worm which protruded from the patient's right leg; he at once distinctly felt the sensation of the worm "wriggling" within, which caused him slight pain. I left him for about an hour with my hospital assistant, with instructions that slight and gradual traction should be applied on the worm, and by these means, and in this short space of time, the whole worm was extracted entire. Afterwards, I applied the battery, as before, to the worm protruding from the patient's thigh; and, although the effects on this worm were not quite so satisfactory, still the result was very encouraging, as the entire worm was successfully extracted next day. Poulitices were applied over the fistulous opening on the foot and the patient's left hand—the situations of the two other worms. On July 30th four inches of a worm were extracted from the foot after the battery, and subsequently a poultice, had been applied. No other worm reappeared here, and the inflammation soon subsided. I therefore concluded that the whole of the remaining portion of the worm, which the patient had previously broken, had now come away.

On August 3d, about two inches of the worm on the patient's left hand appeared after the bursting of a small abscess. Galvanism was applied to this worm as in the former instances, and a poultice ordered. Galvanism was again applied on August 5th. The worm had protruded four inches, and was now six inches long. On August 6th the protruded portion of the worm was about twelve inches in length. The battery and poultice were applied, and in the evening the entire worm was extracted whole. There being now no signs of the presence of any other worms, the patient was discharged from the hospital.

Remarks.—The usual routine method of treatment in these cases is the application of poulitices over any inflammation caused by the presence of a Guinea-worm, and, when once the worm has appeared, means to prevent its re-entry into the body are resorted to, such as twisting the protruded worm round a small quill or other convenient substance, and gradually twisting the worm more and more each day till the whole is extracted, a decidedly lengthened and tedious procedure in most cases, and usually unsatisfactory in its results, as the worm is very apt to be

broken, and, if so, the general constitution of the patient suffers. The idea of applying counter-irritation to the worm itself to expedite its safe extraction in these cases, first struck me when perusing some notes (*Annual Medical Reports of the British Army*) by Surgeon Stewart, Bombay Medical Department, in which he stated he had tried the experiment of applying the sting of a scorpion to protruded worms; and my object in recording the above brief notes of my case is to bring to notice the very satisfactory results I obtained by far simpler and more convenient means of counter-irritation, viz., the application of galvanism to the worm. This, no doubt, has the effect of paralyzing the worm to such an extent that practically there is no resistance to its extraction so far as the worm itself is concerned, and its rapid and entire extraction is consequently made easy if only ordinary care be taken in handling the worm.

Although this mode of treatment is a novel one (so far as I am personally aware), still I feel that the successful result of the above case, obtained by its means, is sufficient in itself to warrant the hope that others more favorably situated than myself for meeting this disease will give it a fair trial, and record their results.

Protean Skin Affections in Children.

Before a recent meeting of the Academy of Medicine in Ireland, Dr. C. F. Moore read a paper detailing a protean skin affection. He stated that children were not infrequently attacked with a complication, assuming a resemblance to pruritus cutaneus of Hebra, prurigo, pemphigus, and, in some severe cases, pemphigus gangrenosus, or burnt holes of older authors. The diseases which in Dublin had been complicated with the foregoing in varying degrees of severity, were variella, scabies, insects, dentition, certain forms of rash, induced by inunction of irritating medicinal or domestic remedies, and, rarely, vaccination. The cases which had lately come under his notice were those of children whose ages varied from a few weeks to eight years. He did not think he had seen in this country a case of the disorder specially named prurigo by Hebra. Bad or unsuitable food tended strongly to the production of the disorder. The irritation caused by pediculi and other insects, and by clothing in a damp or uncleanly state, not uncommonly produced pruritus. Unhealthy surroundings, and a low condition of the child, or of its nurse, tended greatly to the production of the ailment which he wished to bring under notice. The treatment of these cases resolved itself into general and local—better sanitary condition, better food for the child, removal as far as possible of the cause of the irritation, thorough cleanliness, and, generally speaking, soothing applications; baths, with bran, or tar, or liquor carbonis detergens, etc.; mild alteratives, with suitable tonics; cod liver oil, or preparations of iron. In all cases inquiry should be made for the presence of intestinal worms, and the treatment suitable pursued. The affection, which seemed allied to prurigo, pruritus, and pemphigus, occurred in eight cases that were originated apparently by varicella; in four cases where scabies existed previously; in one case in which tallow had been used as a domestic remedy

by innunction; and another in which a very slight appearance of prurigo natis existed. The latter ailment was apparently increased after vaccination. The cases that had come under his notice had occurred almost invariably either in the cold spring or early winter. He did not refer to the many cases of pruritus and prurigo that he had seen in the adult and in youth. The affection noticed by Mr. Hutchinson, of London, as varicella prurigo, and regarded by Mr. Balmanno Squire rather as ecthyma or lichen urticatus, seemed to resemble cases which he had seen in Dublin, but which were of a very protean character, and did not generally assume the serious forms described by Mr. Hutchinson, or by Professor Hebra in describing the life-long character of the prurigo met with at Vienna.

Dr. H. C. Tweedy described the case of a boy aged sixteen, who had come under his observation, presenting the features of true prurigo, which he had had since childhood, and which resisted all treatment.

Dr. Duffey said Dr. Moore had described several skin affections, but had not specified the particular one which he considered now prevalent. It was a common thing to find eczema on the soles of the feet and the palms of the hands in infants.

Dr. Fitzpatrick did not believe that pure vaccine matter would produce skin disease in a healthy child.

Dr. Moore, in replying, was glad to find that Dr. Fitzpatrick's experience confirmed his own opinion that vaccination in itself was not a cause of skin disease.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—The "Fifth biennial Report of the State Board of Health of Maryland" forms a volume of 275 pages, with a great deal of good and original matter in it. The report of the Secretary, Dr. C. W. Chancellor, surveys the whole field of action of the Board, and is full of suggestion. A number of valuable papers were read before the convention on subjects relating to public health, and are printed with the report. The volume can be had of the Secretary, Baltimore, Md.

—The "Thirtieth Report on the Births, Marriages, and Deaths in the State of Rhode Island" (for 1882) is a portly pamphlet of 178 pages, bristling with statistics, and presenting the vital records of the State with every desirable fullness and with most satisfactory clearness. It is a model volume of its kind. Those wishing it may address Chas. H. Fisher, M. D., State Registrar of Vital Statistics, and Secretary of the State Board of Health, 17 College street, Providence, R. I.

—A "Tribute to J. Marion Sims, M. D.," by Dr. W. O. Baldwin, Montgomery, Ala., is a com-

position full of appreciative views of the great gynæcologist's career.

—A striking paper was read by Dr. E. P. Howland, of Washington, D. C., before the American Association for the advancement of science, at Minneapolis, August 20, 1883. Its subject was "The Application of Nitrous Oxide and Air, or Nitrous Oxide and Oxygen, Under Pressure, to Produce Anæsthesia in Persons for Dental and Surgical Operations." He begins by saying: "From my own experiments and the practical operations made in Paris, I believe that the administration of nitrous oxide and air or nitrous oxide and oxygen, in condensed air chambers, will yet supersede the use of ether and chloroform in prolonged dental and surgical operations, as nitrous oxide has already superseded them in ordinary dental operations." The reasons he gives seem to us very conclusive.

—The fourth annual report of the Newark (N. J.) Eye and Ear Infirmary, indicates that it has grown to a position of great usefulness in that community.

—The Annual Announcement of the Cooper Medical College, San Francisco, shows that institution to be in a flourishing condition.

—*Godey's Lady Book* for March is a number upon which it would be hard to make any unfavorable comment. For some time past we have been watching with interest and pleasure the liberal policy which has been pursued by the present proprietors of this progressive magazine, and, from the evidence before us, we are now prepared to say that the editors of *Godey's* are bent upon placing the future record of the magazine on a higher plane than it has ever stood before.

—*Lippincott's Magazine* for March opens with an article on "The Berlin of To-Day," by Anna Maynard Butler, sketching the chief features, external and social, of the German capital, with illustrations, including a portrait of the Emperor and views of the old castle and Bismarck's palace. Quite a number of other excellent articles are included.

—The Tenth Annual Report of the Cincinnati Sanitarium has an excellent introduction from the pen of the Superintendent, Dr. Orpheus Everts. Among other matters, he says of venesection:

"Fifty years since, blood-letting was the first remedy suggested and employed by the medical profession in the treatment of nearly every form of disease. Not one physician of a thousand now bleeds a patient under any circumstance. The more intelligent and thoughtful, however, begin

to recognize the fact that the profession has been carried to an unprofitable extreme by the force of fashion in this matter. The lancet will be used again, not as a fashion, but as a matter of judgment, based upon knowledge."

—In a reprint before us, Drs. C. A. Oliver and C. H. Burnett, of this city, give the details of a rare and interesting case of recurrent dropsy of the left middle ear, complicated, after eight years' duration, by an acute attack of monocular optic neuritis (choked-disk) on the same side, followed by general tabetic symptoms; with remarks.

BOOK NOTICES.

A Manual of Obstetrics. By A. F. A. King, M. D. Second edition. Philadelphia: H. C. Lea's Son & Co. Small 8vo., pp. 338.

A condensed and yet not superficial presentation of the art of midwifery is satisfactorily accomplished by Dr. King in this little volume. He has not confined himself to what a student needs for his examination, and has omitted the discussions of debated points which take up so much space in the larger treatises. In the present edition he has increased the size of the book somewhat, and has carefully revised all the text. A sufficient number of illustrations are inserted to explain positions and instruments.

Female Hygiene and Female Diseases. By J. K. Shirk, M. D. 8vo. cloth, pp. 102. Lancaster Publishing Company, Lancaster, Pa.

It is a debated question how much information ought to be given to the public about diseases of females. We are and always have been in favor of teaching them freely, provided it is done in the proper spirit and manner. We can say of this little work that it fully meets these requirements. It is alike free from superficiality and sensationalism, and one should have no hesitation in recommending it to any woman who desired to acquaint herself with the hygiene of her sexual life. The author is a respected regular physician, and his volume is meritorious.

Legal Medicine. By Charles M. Tidy. Vol. iii. New York, Wm. Wood & Co.

This volume, one of Wood's Library of Standard Medical Authors, contains the portions on sexual crimes, asphyxia and suffocation. It is a very carefully studied treatise, though written from the English point of view, and not so useful to the American reader as one based on the practice of our own courts. The collation of cases is large, and they are presented in a thoroughly systematic manner.

The Medical Directory of Philadelphia for 1884. Edited by Samuel B. Hoppin, M. D., Philadelphia: P. Blakiston, Son & Co., 1884. 1 vol., 8vo. Price, \$1.50.

This convenient little volume contains a list of the Hospitals, Homes, Asylums, and Dispensaries of Philadelphia, druggists, physicians, medical societies, public boards, colleges, and the laws relating to practice. It will be found very convenient for reference, and as far as we have examined it, is quite accurate.

A System of Oral Surgery. Being a Treatise on the diseases and surgery of the mouth, jaws, face, teeth, and associate parts. By James E. Garretson, M. D. Illustrated with steel plates and numerous wood-cuts. Fourth edition, thoroughly revised, with important additions. 8vo. extra cloth, \$8.00. J. B. Lippincott & Co.

The treatise of Dr. Garretson has been markedly successful in the field which it occupies. Not only has it been found a standard work of reference for the surgeon and practitioner, but as a text-book for students it has been adopted by dental colleges throughout our country as the most approved system of oral surgery to be found. It is indeed remarkably complete, and one has but to turn over its leaves, or look through its index, to appreciate how exhaustively all the topics relating to this specialty have been treated.

If the investigation is pursued further, and an individual chapter is selected for perusal—as, for instance, the comprehensive one on "Associative Lesions of First Dentition"—the reader will find an excellent monograph, carefully condensed to the limits of a chapter, and expressed in language of admirable clearness.

Or again, take the last chapter, that on "Diagnosis," and we are presented with a most masterly exposition of this intricate subject, in which our judgment hesitates which to praise highest, the fullness of scientific knowledge, or the select phraseology in which it is set forth.

With regard to the present edition, it has been enlarged by several new chapters; much of the text has been rewritten and rearranged, and seventy-five new cuts have been added. The wide experience of the author in the field of his selection appears on every page.

The manufacture of the book is of the best character. In the somewhat over a thousand pages of text, there are more than six hundred cuts, and a number of steel engravings. While many of them are from other works, there are quite a number which are new.

We may say that this volume fills the demand for a book on this specialty, and while by revision and improvement it is maintained at its present excellence, there will not be room for another.

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THE DISCOVERY OF UREA IN THE SALIVA OF
PATIENTS SUFFERING FROM MORBUS
BRIGHTII.

That there are many varieties of morbus Brightii is a well-established fact, and that some varieties later will be proven to form a disease by themselves can scarcely be doubted. It is also well known that some forms of Bright's disease never evince symptoms of uræmia, that the patients suffering from one of these die of other complications, while there are again varieties of diffused kidney disease, in which the patient invariably succumbs to uræmia. The facts last mentioned have already found one explanation. In those forms of the malady where large serous effusions are a common occurrence, these watery accumulations have been found to contain great quantities of urea; the serous cavities are, therefore, in these cases *quasi* reservoirs for the surplus of urea, and the blood is kept comparatively free of this obnoxious and dangerous substance, while in those cases where dropsies and œdemas are rather rare, this great product of waste is bound to accumulate in the blood, if the latter has no other outlet for it. The kidneys are unable to excrete it in sufficient quantities, its excretion by the serous membranes is also at fault; the blood, therefore becomes the reservoir for it, and as a natural consequence we see that whenever the quantity of urea in the blood becomes sufficient to poison the latter, uræmia, *i. e.*, poisoning of the blood by accumulation of urea, takes place.

It was by no means foreign to the subject to suppose that in those cases of diffused kidney disease, where large watery effusions do not rid the blood of the urea, other fluids in the body would contain the urea, and this would be especially the case in that form of morbus Brightii, contracted cirrhotic kidney, in which, as is well known, serous effusions belong to the rare phenomena; yet, some cases, running their slow course for years, reach their fatal termination without almost the least œdema having made its appearance, while the sudden development of uræmia is as frequent as the fact that death usually assumes the latter form.

Dr. R. Fleischer has recently made this subject a special study. He supposed the saliva to contain urea in the cases which we last mentioned, and his laborious researches (published in the *Med. Chir. Rundschau* for 1883) proved that such does really happen. He discovered urea in all those cases where a cirrhotic kidney formed the malady, and in all others where uræmia appeared later or caused the death, even if at the time no symptom of uræmia occurred. His discovery, while it may lead to other interesting investigations, has probably also a diagnostic value. It is known that occasionally we meet with cases of contracted kidney, where for certain periods neither œdema or dropsy, nor albumen or tubercasts, are present, where the history alone, or the condition of the heart, the deterioration of the blood, or the examination of the retina, can instruct us regarding the nature of the case.

For this reason we will translate for the benefit of our readers the method employed by Fleischer.

To gain for the original experiments a larger quantity of saliva, one-third of a grain of pilocarpine was injected subcutaneously into the individual to be experimented upon. Thus larger quantities of saliva were procured than it had formerly been possible to obtain. For the first investigations he had 300 grammes (about $2\frac{1}{3}$ ounces) at his disposal; later, 800 grammes; then 2 litres; and finally 4 litres. The buccal cavity first was thoroughly cleaned, then the saliva immediately after its secretion combined with absolute alcohol, precipitated, then filtered, the filtered part evaporated, the residue treated with absolute alcohol, and after evaporation dissolved in amyl alcohol. By this method even very minute quantities of urea could be discovered. If the amyl alcohol is permitted to evaporate in a hot porcelain dish, any urea dissolved in it will separate itself in the shape of the finest needle-crystals, which before and after their change into nitrate of urea, may be identified either microscopically or by their chemical reactions. In healthy individuals (those first experimented upon) up to two litres no urea was discovered; in 3 litres (about 3 pints) such minimal

quantities were detected as to be unweighable. Such minimal quantities must be considered as irrelevant. But as this method permits the detection of $1\frac{1}{2}$ milligramme in 250 cbctm. saliva, it is more than sufficiently accurate.

In conclusion, we will add that Fleischer succeeded in every one of the cases mentioned above (cirrhotic kidney, and other forms of Bright's disease, where uræmia threatened), to demonstrate a weighable quantity of crystallized urea in 250 cbctm. saliva, and that the largest quantity he detected was 0.3 to 0.4 (about $\frac{5}{8}$ gramme) of urea per day.

THE PROPER METHOD OF MEDICAL LEGISLATION.

We often hear complaints by physicians that legislatures are so supine about passing laws regulating sanitary measures, creating health boards, against quackery, and the like. The fact is so: but what is the reason of it?

That it is solely to be charged to the general ignorance and neglect of public health in the minds of legislators, we do not believe. We should rather be inclined to put, if not the ignorance, at any rate the neglect, at the doors of medical men themselves.

They make no combined general effort to carry through a well-digested plan about which the large majority are in unison. If they did, there is little doubt they could carry any measure which they would thus unite upon. We have on various occasions put this prominently forward as the real cause of the failure to create a Board of Health for this State, and other similar legislation in any State; and we are reminded of it by a passage in an address on medical legislation by Dr. H. Hakes, of Wilkesbarre, Pa. His words present the subject so well that we extract them:

Preliminary to asking or recommending medical legislation, there ought to be something like unanimity and general agreement among the members of the profession as to the statute proposed to be enacted. As in any other matters of legislation, to be efficient the proposition requires united or concerted action and active work—in not exactly parliamentary, but common parlance, the legislature must be bored. We will do well

to simulate the methods of corporations, monopolies, temperance advocates, the liquor dealers, etc. As there will probably be no further meeting of the General Assembly within a year, let us improve the time, and through individual and societies' effort, inquire of each candidate for legislative honors how he will feel disposed toward those legislative measures which the profession are already agreed upon, and which are of urgent, immediate, and vital importance to the people of the State. An ordinary legislator is not such an awe-inspiring individual that we are to suppose he knows everything. Who among our number has spoken to our Representative in Congress about a more liberal appropriation for the National Board of Health? Probably not one; and yet if addressed by the two medical societies over which his constituency extends, I doubt not you would in due time hear a good report of him. And the same might be said of all the other members.

This, as the Romans used to say, touches the matter with the point of a needle—*rem acu tetigit*. It shows just where the trouble lies. The profession has not yet learned—though the lesson is not a modern one—that Wisdom may cry in the streets till she is hoarse and no man will regard her. She must do more than cry and preach. She must personally button-hole her hearer, and insist that he, individually, do what is required, until, at last, even if he be like the unjust judge, and respects neither God nor man, he will do it that she may cease troubling him.

Less metaphorically speaking, we must use our personal acquaintance with our legislators while at their own homes, to make them understand what we want, and impress it so often and so thoroughly on their minds that they will vote in favor of public health projects when they are brought up.

THE ECONOMICS OF DISEASE.

There is one side of preventive medicine that may be urged upon the public with a strong chance of securing their attention, and that is the expensiveness of disease. In their individual cases they appreciate it well enough, and often howl loudly about loss of time and heavy bills at the doctor's and druggist's. But with the narrow-

ness of view and selfishness of interest which generally characterize mankind, it is hard to get them to look at its cost in gross.

This may be estimated in several ways, and includes a number of factors. It has been calculated by statistical hygienists that of the cases of disease now current in civilized communities, about *one-third* could have been prevented by intelligent sanitation, personal or general. In our opinion this estimate is too low, rather than too high: but take it at one-third. Then the actual loss to these patients or their families is represented by one-third the whole amount paid doctors, druggists, nurses, etc., in a community, plus the loss of time, whatever that may be.

But this is only the first item in the bill of charges.

One-third of all the investment locked up in hospitals, dispensaries, asylums, homes, etc., could be placed to profitable and productive use were the laws of health observed.

Much more than this: numerous limited localities, vast tracts of fertile land, now shunned or but partly tilled, because of their ill report on the score of health, would be doubled, quadrupled in selling value and producing power, were they made free from the poisons which infest them. Millions of acres of the finest soil in the United States are lying idle by reason of the paludal poisons which are generated about them. Yet there is strong testimony that systematic action on the large scale can overcome these miasms.

We have spoken only of disease, but we must also take into account the sequelæ of disease in destroying ability to work, and thus casting the heavy expenses of permanent invalidism on the family or the commonwealth, or, by a fatal result, depriving the community of a life which would have possessed a value as capital applied to the production of wealth.

This has been the subject of calculation by political economists in England and Germany, and in both countries they have reached the conclusion that the value of an unskilled laborer, at twenty-five years of age, to his country, is \$1200. In other words, this is the average sum which

such a person will contribute during his life to the wealth of the community in which he lives. Now, if we suppose one-third the deaths in a community are preventable, we can readily see how much richer the community would be were it to exercise the necessary prophylaxis.

These are but a few of the practical considerations to which this subject leads, but they will serve as hints how strong a case may be made of this side of sanitation.

PHILADELPHIA SEWAGE.

That our sewage system, scanty and primitive as it is, is fundamentally faulty, the merest sanitary tyro knows full well.

Now that Boston has introduced a new and very good system of drainage, it will be in order for us to follow suit and to endeavor, if possible, to outdo our sister city. Our Public Buildings will, or at least *ought* to be soon finished, and then we presume that our rulers will be casting about them for some new job, and to save them trouble we will suggest one that will place our city, from a sanitary point of view, ahead of the world.

It has been calculated that the money value of the total annual excreta of each individual is two dollars. For our city this makes two million dollars that is annually wasted. This sum would certainly represent a very large interest on the cost that would be incurred in properly sewerage our city, and by a pneumatic system removing the waste to a distance and converting it into manure. Financially and hygienically, such a proposition should commend itself to our authorities.

NOTES AND COMMENTS.

Intermittent Fever Among Children.

A very valuable paper was that read before the British Medical Association by Dr. W. R. Thomas (*Brit. Med. Jour.*, January 19, 1884,) entitled "On Intermittent Fever Among Children in Low-lying Districts; Its Frequency and the Importance of Recognizing It, Owing to Its Curability." The symptoms he thus describes:

"The child for a few days appears to be cross and irritable, disinclined for fun or amusement,

and seems to be languid and excessively weak; the appetite is poor, and whenever moved the child cries, as if any movement gave rise to pain. After a time the patient seems to be cold; the face looks pale and pinched; the hands are shrunken and pale; the skin generally is dry and rough; the appetite is poor; the respiration is frequent, and the pulse is frequent and small.

"After a time, which is extremely irregular, ranging from half an hour to two or three hours, the skin begins to be hot and dry, the pulse, which before was frequent and small, becomes now full and yet frequent; the respirations become more frequent; there is want of appetite, great thirst, costive bowels, the urine is scanty and high, and occasionally there is slight delirium. This stage continues for from two to six hours.

"Then comes the sweating stage; the whole skin becomes bathed in perspiration, and all the symptoms abate; respiration becomes more natural; the pulse full, and less frequent; the appetite improves; the thirst goes; and a deep sleep comes on, from which the patient awakens apparently refreshed, but very languid.

"Such is a description of these cases when seen by the medical man daily; but generally speaking, in the out-patients' department in hospital practice, it is difficult or impossible to obtain a concise account of the case from the parent. This is the sort of a case we are apt to see. A patient, aged eighteen months, is said by the parent to have been becoming weaker day by day for the last two months. The lips and face are pale; the pulse frequent and weak; the appetite is poor; thirst is great; bowels costive; urine high; there is no lung or heart mischief; no abdominal signs of importance.

"In such a case it is often difficult to make a proper diagnosis; and when we see a patient daily becoming weaker, and more especially if we get a history of the heats and sweats, we are apt to look out for tuberculosis. I have many times been quite at a loss when trying to ascertain the cause. I have looked out for phthisis, pulmonary, or abdominal; and, thinking that the profuse perspirations, in the head and all over, the throwing off of the bed-clothes, the constant crying, as I presumed, from aches and pains, might be symptomatic of rickets, I have looked out for other corroborative symptoms, but have failed to meet with them.

"Whenever I meet with cases presenting such symptoms now, I always make particular inquiries as to where the patient is living, and

almost invariably find that the house is in a low-lying region of the town, that it has been, in fact, exposed to malaria, but not in the concentrated form which produces ague."

In these cases quinine acts like a charm.

Salicylic Acid In Cerebro-Spinal Meningitis.

The great fatality of this disease lends additional value to the article in the *St. Louis Courier of Med.*, February 1884, by Dr. D. C. Ramsey, which he thus concludes :

1. The analogy existing between rheumatism and cerebro-spinal meningitis would suggest and be good reason for the use of similar remedies in both diseases.

2. Salicylic acid being the best remedy, almost a specific in the treatment of acute articular rheumatism, would be a strong indication for its use in cerebro-spinal meningitis.

3. It produces a marked reduction in the temperature; the fever being thus lowered, the tissue-destruction and the onward progress of the inflammation is checked, thereby giving the patient rest.

4. It controls the intensely annoying metastatic pains of head, back, elbow, and knee, giving the patient ease.

5. It exerts a direct influence for good over the inflammation itself, and can be taken in frequent large doses without bad effect; having given a boy 15 years of age half-drachm doses every four hours for three or four days, with the only result of a great benefit in all the symptoms connected with the disease, is, I think, conclusive evidence of its harmlessness.

6. Its good effects are soon apparent, and it does not interfere with the use of other measures of relief, as ice, blisters, etc.

7. The best mode of using the remedy is to administer large doses frequently. For adults begin on doses of 15 grs. repeated every two hours, and increase the dose as may be found necessary to obtain the desired effect, to $\mathfrak{Hj}$, at intervals of two hours, if need be. When the disease is under control, which will be determined by the reduction in temperature, relief of pain, and placid countenance, decrease the dose, give at longer intervals, but still continue the use of it in small doses as long as the least symptom is present indicative of the disease.

Having never heard nor read of salicylic acid being used in the treatment of cerebro-spinal meningitis, and my good success with its use in this fearful epidemic being afterwards verified by Dr. J. B. Weaver, of this place, I hope to induce

others to give this remedy a trial, and by so doing I think they will be enabled to see very happy effects from its use, and thereby be highly gratified with the results.

The Tubercle Bacillus.

The question of the diagnostic value of this parasite has assumed such great importance that it behooves us to gather together all valuable opinions on the subject. Dr. G. H. Mackenzie has thrown additional light on the subject in an excellent article in the *Edinburgh Med. Jour.* for February, 1884, which concludes thus :

1. The bacillus of tubercle is pathognomonic of tubercular disease: found in the sputum, it indicates that active tubercular disease is in progress in the lungs, in the larynx, or in both.

2. It is absent in non-phthisical disease, in some cases of chronic (fibroid) phthisis, and during quiescent stages of the disease.

3. It is found in greatest numbers in acute phthisis with fever, softening, and cavity formation, but is also present in fair numbers before consolidation can be detected, especially if the larynx be affected, and it is thus useful in the diagnosis of incipient phthisis.

4. In a given case its numbers vary according to the nature and origin of the pulmonary secretion, and the period of the day at which it is expectorated, as also according to whether it is or is not free from extraneous matter in excess—*e. g.*, gastric secretion, saliva, or blood.

5. Found in the laryngeal secretion on its direct removal, it is a most valuable aid in the diagnosis of laryngeal tuberculosis.

6. In hemorrhage from the lungs, the presence or absence of tubercle bacilli in the hemorrhagic fluid has a most material influence on the prognosis.

7. Negative results in important or dubious cases cannot be held as conclusive unless examinations by different methods have been made on at least three different occasions.

8. Whilst its diagnostic value is thus of a very high standard, indicating the existence of tubercular disease, its prognostic value cannot be determined with accuracy, inasmuch as it may be as abundant in a comparatively slow non-febrile case as it is in a more acute and febrile one.

Pre-Fœtal Dilatation of Vulva to Save the Perineum.

Prof. Dunas, in the *Montpellier Médicale*, criticises the various methods of supporting the perineum, and comes to the conclusion that none of

them are either scientific or satisfactory. With Dr. Duke's method of stretching the perineum during the pains (*Brit. Med. Jour.*, 10th March, 1883), he expresses himself as not satisfied, and states that he believes such interference may occasionally lead to the occurrence of the accident it was designed to prevent. He draws attention to several cases of primiparæ noticed by him, where the vulva became quickly dilated, while the time taken for the head to reach the vulva had been long; and this he explains by the presence of a voluminous caput succedaneum in such cases, which leads to dilatation of the vulva while the head is still engaged dilating and passing through the vagina. The procedure he recommends, and which he designates "præ-fœtal dilatation of the vulva," consists in introducing two or more fingers and the thumb of the right hand into the vagina, and fitting the hand on to the head, not exerting any force on the approaching head, but rather allowing it to push the hand in front of it, and thus take the place of the caput in such cases as he describes.

Sudden Dislocations During Acute Rheumatism.

The *Dublin Jour. Med. Sci.* for December, 1883, says: In the course of a case of acute rheumatism, articulations in a bad position may suddenly become dislocated without bony alteration, and without suppuration. These luxations can be reduced instantaneously like traumatic dislocations, and the limb regains its natural appearance. M. Verneuil recently communicated to the *Société de Chirurgie* (*Gaz. Hebdom.*, 9 Nov., 1883), seven cases in which he observed this form of dislocation. At the present time such dislocations are attributed to hydrarthrosis. M. Verneuil does not deny that they may be due to hydrarthrosis, but he has never determined its existence. In two cases of luxation of the knee there was no fluid present. The muscular system plays a very important part in the production of luxations—paralysis existing in one group of muscles and contraction in another muscular group. It is important, therefore, to be on the watch for faulty positions of the joints in rheumatism. The reduction of these dislocations is easy, and subsequently the limb resumes its normal form and functions.

Common Salt in Pleuritic Effusions.

Dr. Tom Robinson, in the *British Medical Journal*, of December 22, 1883, relates a case of pleurisy with effusion, accompanied with "cold clamminess of hands and brow, and breathing 51 times

in a minute, the pulse barely appreciable at the wrist, and the heart pushed over to the right." He was ordered a teaspoonful of common salt dissolved in a wineglassful of water every hour, at the same time sweating by a hot wet flannel and a piece of waterproof sheeting. At the same time two ounces of the common black draught were administered, and all fluids were stopped. Two hours afterwards "he had most markedly improved in every way," his respiration being 48 per minute. In ten hours "he could lie on either side and get well down in bed." Next day there was no embarrassment of breathing, and all his subjective symptoms had disappeared. He was now given one drachm of common salt twice a day, with good nourishing food, and in a week he was up and out of doors.

Glycerine after Bathing.

Like the ancient Romans, D. S. Troy, of Montgomery, Ala. (*Popular Science News*), has taken to using glycerine after bathing, with most happy results. He puts one drop of attar of roses in two ounces of glycerine, and rubs the body after bathing. The result was charming: it left the skin soft, with all of its functions in as full operation as before the bathing, and with a delicious sensation of perfect cleanliness. He has been using it for four or five years regularly, leading a life more sedentary than ever, and it seems to supply to the skin a vigor similar to that resulting from muscular exercise. It has been of great benefit to his general health and personal comfort. No care is required in rubbing it on, except to see that it is applied to all the skin except the face, and particularly to the soles of the feet. If any remains after the rubbing, it can be readily wiped off with a towel.

Iodide of Potassium in Syphilis.

In the course of a lecture on the treatment of syphilis, published in the *Med. News*, Prof. Dujardin-Beaumetz says:

Whenever you give iodide of potassium in massive doses, do not forget that you must prescribe at the same time the milk diet. Milk, in favoring the elimination by the urine of the iodine, and in preventing the irritant action of this salt on the digestive tube, antagonizes the baneful effects of this medication. The solution which I advise you to use is the following:

R. Iodide of potassium, 225 grs.
Water, 8½ f℥.

M.
Each tablespoonful of this solution contains

about one gramme (fifteen grains) of iodide of potassium.

You should commence with small doses, and when the iodic coryza appears, discontinue for several days the use of the medicine, to resume it in larger doses. The economy in fact habituates itself to the iodide; and persons who, at the commencement of treatment, suffer from irritations of the mucous membranes as a result of small doses, a little later may bear without inconvenience much larger doses of this medicine.

Nitrite of Amyl in Pneumonia.

From *La France Méd.* we note that Prof. Silvestrini has been using nitrite of amyl in pneumonia, and he thus formulates his conclusions:

1. In the pre-organic stage of pneumonia, the nitrite of amyl may be of prompt and effective service.

2. One may repeat with impunity the inhalation of this remedy during several successive days, and in doses relatively enormous. (He has administered as much as 50 grammes of the nitrite in five days, the inhalation being carried on for five minutes every half hour.)

3. In cases which have a fatal issue, whether from extension of the pneumonia, or from complications, these inhalations may retard death.

To Hasten the Anæsthetic Action of the Ether Spray.

From the *Revue Méd.* we learn that a little device, first indicated by Dr. Letamendi, of Barcelona, is employed by Dr. Vidal to shorten the duration of the process of congelation. It consists in making a slight prick with a needle at the point upon which the spray is directed, at the moment when the skin assumes a purplish hue, and when the ether commencing to solidify assumes an oily consistency. The little puncture made at this time excites a reflex constrictive action of the vaso-motor nerves, the blood is driven from the part, and the skin becomes white. Another method of hastening the process consists in placing little wads of lint about the part, thus increasing the surface of evaporation.

Ether vs. Chloroform as an Anæsthetic.

Dr. J. W. Parkinson concludes an elaborate article on this subject in the *Pacific M. and S. Journal* as follows:

1. That ether is as efficient an anæsthetic as chloroform. 2. That there are fewer cases in which its use is contra-indicated. 3. That it is a

safer anæsthetic in the hands of the most experienced, and by inference corresponding in an increased ratio with those more or less unskilled. 4. That the use of chloroform with our present knowledge and experience, in preference to ether, where no contra-indication to the latter can be shown, is adding materially to the risk of the patient and the responsibility of the administrator.

A Ready Caustic.

From the *Jour. de Med. de Brux.* we learn that Dr. Moser recently presented to the Paris Academy of Medicine a little invention of his which he called the *crayon-feu*, for ready use in the application of the actual cautery to poisoned wounds from the bites of venomous snakes, mad dogs, etc. It consisted in a little cylinder with sharpened extremity, enclosed in a case which also contained matches for lighting it. The composition of the stick is as follows: Powdered charcoal, 30 grams; nitrate of potassium, 4 grams; iron powder, 5 grams; benzoin, 1 gram; agglutinating powder, q. s. To be made into forty crayons. These sticks are hard and burn readily, and for a sufficient time to cauterize the wound.

Death from Heart Rupture.

Mr. Baldwin relates a case in the *Brit. Med. Jour.*, January 5, 1884:

At the post-mortem examination, all organs were healthy. The pericardium was bulging, and, on section, was found to be filled with clots. The left ventricle was ruptured at the apex to the extent of nearly two inches; and above, to the extent of three-fourths of an inch. The aorta and valves were healthy; the mitral were slightly fringed with old vegetations. A huge clot filled the apical rupture, and in the heart, around the columnæ carneæ, some ante-mortem clots were found; the ventricular walls being thin at the seat of rupture. The patient had, eight months previously, lost a son from aneurism of the third part of the aorta; he had no other symptoms than persistent pain in the left mammary region, and in the neck.

A Tonic Pill.

The following formula is highly recommended in the *Med. Press and Circular*:

Reduced iron,	1 gr.
Ext. cinchona,	4 grs.
Arsenious acid,	$\frac{1}{10}$ gr.
Ext. nux vomica,	$\frac{1}{8}$ gr.
Gentian,	q. s.

For one pill. One three times a day.

Syrup of Coffee to Disguise Quinine.

Syrup of yerba santa has been satisfactorily used for this purpose, but now we note the following in *New Remedies*: Roasted coffee finely ground four ounces, alcohol one ounce, sugar twelve ounces, boiling water sufficient. Pack the coffee firmly in a percolator provided with a cover, and pour on boiling water until eight fluid ounces of percolate are obtained. Then dissolve the sugar (in the percolate) by percolation, and finally add the alcohol as a preservative. The taste of two grains of quinine is said to be pretty well covered by a drachm of syrup.

Phenic Acid in Yellow Fever.

Dr. de Lacaille, of Rio de Janeiro, professes to have cured thirty-eight consecutive cases of yellow fever by the use of Déclat's preparations of phenic and sulpho-phenic acids, and in grave cases, the phenate of ammonium. In the early stages he gives the remedies by the mouth, but in the advanced stages the hypodermic method is necessary. He contrasts very favorably his recent experience with his former sad failures without these drugs.

A Reliable Tœniafuge.

R.	Extracti filicis maris,	3 iss.
	Pulveris kamalæ,	3 ij.
	Mucilaginis acaciæ,	
	Syrupi simplicis,	aa 3 ij.
	Aquæ cinnamomi,	ad 3 ij.

M. S.—Half to be taken at bed time, and the other half early in the morning.

Mr. J. B. Lawson reports good results from this in the *Glasgow Med. Jour.*, January, 1884.

SPECIAL REPORT.

NO. XVI.—OPHTHALMOLOGY.

BY C. S. TURNBULL, M. D.,

Oculist to the German Hospital, Philadelphia.

Ophthalmia in the Expeditionary Force of Egypt. Med. Times, October 14, p. 447.

During the last campaign in Egypt 60 men per day became affected with ophthalmia. Oculists should accompany an army during such a campaign.

The Etiology of Hydrophthalmus. Centralb. f. Prakt. Augenheilk, August, 1882.

Mayerhausen saw hydrophthalmus develop during dentition under the symptoms of acute glaucoma. Eserine proved very efficient.

Parrot observed *Mydriasis during Coma* in fifteen cases of chronic infantile affections of the brain, as soon as he pinched the skin more severely. (Rev. de Méd de Paris, October, 1882.)

Minor. *Duboisine for Photophobia.* Virginia Med. Monthly, September, 1882.

Photophobia in keratitis disappeared very rapidly when duboisine was used, but not after atropine.

The Effect of Direct Sunlight upon the Retina. Arch. f. Ophth., vol. xxxiii., 3.

Deutschmann has found that direct sunlight produces changes in the retina similar to those of disseminated choroiditis. The retina is converted into a more or less structureless mass, the albumen being coagulated. Regeneration does not take place. The blood-vessels of the choroid in the region affected are widely distended, and small hemorrhages and little round nodules enclosed in spindle-cells are found.

Investigations on the Visual Perception of the New-born. Halle, 1882.

Genzmer thus describes the development of sight in the new-born: The eyes are sensitive to light immediately after birth, and the pupils react promptly. When a strong light suddenly falls upon them, they converge. A new-born child cannot follow an object with the eyes, but can fix upon it when in the line of vision. Perhaps this can be explained by an insufficient development of the optic tracts. The conclusion also follows that, at first, the child only has impressions of light and dark, which are mainly transmitted from the macula lutea. Convergence for the purpose of fixation was not observed until the fourth week. An energetic contraction of the ciliary muscle was observed with the ophthalmoscope in a child two weeks old, when convergence had been produced by strong light; this shows that there must be a pre-formed connection between convergence and accommodation. Colors are not noticed the first few months; white objects first attract the child's attention, no attention being paid to colored. The color sense begins to develop in the fourth month, red being recognized first, though white still takes precedence. It therefore follows that the new-born child is more affected by the quantity than the quality of light.

The Influence of the External and the Middle Ear on the Senses, especially Sight. Wiener Med. Blätter, No. 45.

Urbantschitsch has found that the perception of light is diminished by an affection of the ear; when the latter improves, vision also improves. He thinks it is a reflex action of the fifth nerve.

Aglave believes there are connecting fibres between the centres of hearing and color and perception. *De l'Audition des Couleurs*. Rec'd Ophth., No. 9, September, 1882.

The Good Results of Educating the Color Sense. Centralbl. f. Prakt. Augenheilk., December, 1882.

According to Kroll, 0.3 per cent. of the men in Crefeld and its surroundings, are red-green-blind, a fact which he explains by their occupation, silk weaving having been practiced for two hundred years, which had developed the color sense of the male population. By educating the color sense in the schools a similar result might be obtained for the population of the whole country. He therefore favors a plan looking to this in all the schools.

Myopia in the Trans-Caucasian Female Seminary, the Tiflis Military School, the "Zunker" School, and Artificial Illumination in the Classes and Dormitories. Medicinsky Sbornik d. Kaukas. Med. Ges., 1882, No. 34.

Reich's results were as follows: In the lowest class of the school for girls there was 12 per cent. of myopia; in the highest, 53 per cent., the average being 33 per cent. The development of myopia was due to the poor illumination in the lowest classes. In the three classes of the infantry school there are 52 myopes among 292 scholars. The ratio of the square surface of window to that of the floor was 1.12 and 1.16. The illumination at night was very poor. The majority of the myopes were Armenians.

Hysterical Ptosis. Ophth. Rev., December, 1882, p. 404.

Snell observed a case of hysterical ptosis in a girl about twelve years old, who had been menstruating for six months rather freely. She made a good recovery.

Stretching the Infra-Orbital Nerve for Chronic Cyclitis, etc. Ann. d'Ocul., 1882, vol. lxxxviii., p. 241.

Badal stretched the infra-orbital nerve, and excised a portion of it in three patients with good results. The affections thus treated were neuralgia of the trigeminus, chronic cyclitis combined with phthisis of the globe, and pains in chronic glaucoma (amaurosis). In the first case the infra-orbital nerve had previously been stretched with moderate success; in the second, peritomy had failed; and in the third, a broad iridectomy had proved of no avail.

Tearing the Supra-Orbital Nerve for Neuralgia. Soc. de Chir., Seance du 29 Nov., et 6 Dec., 1882. Gaz. d'Ophth., 1883, No. 1.

Blum hit upon this method by accident, as the

supra-orbital nerve tore while being stretched, the indication being neuralgia, lasting for fifteen years.

Traumatic Aneurism of the Orbit. Brit. Med. Jour., November, 1882, p. 1042.

Glascott observed a case of traumatic aneurism of the orbit producing exophthalmus. Patient derived great benefit from intermittent compression of the left carotid artery. The exophthalmus was reduced, and there was a cessation of whizzing in the head, and the infra-orbital bruit de soufflé disappeared. He also observed a case of aneurism of the orbit, which had existed for some time, which was cured spontaneously during an attack of phlegmonous inflammation of the face and head.

A Case of Intra-orbital Aneurism following Fracture of the Base of the Skull and Meningitis. The Lancet, November 11, 1882, No. 19, p. 799.

Lloyd observed a case of intra-orbital aneurism in a woman of twenty-nine, who had been thrown from a wagon, and had sustained a fracture of the base of the skull. Meningitis ensued, and in about six weeks the left eye began to become prominent and sight to fail. Ligation of the common carotid artery checked the growth of the aneurism for a time, but six months later, the eye being still prominent, it was removed on account of the pain; vision had been lost.

Contribuzione Allo Studio dei Tumori Vascolari dell'Orbita. Giorn. d. R. Acad. d' Med., d' Torino, 1882, Nos. 5 and 6.

Gallenga describes a curious case of unilateral exophthalmus observed at Raymond's clinic. The disease had begun with a marked swelling of the lids of the left eye about six years ago without any assignable cause. A year later, the globe, whose tension had increased a little, became slightly prominent, which gradually increased until finally it became at times a perfect hernia of the globe, the plane of the aperture of the lids falling behind the equator of the eye. The eye generally protrudes, and is turned downward and outward, but covered by the lid. Compression forces the globe back as upon a soft cushion; this is still more the case where the patient lies on his back and the carotid is compressed. When the pressure ceases, the globe springs back beyond, on the margin of the lid, and then gradually returns to its former position. The dislocation of the globe also easily takes place when the head is bent forward and the patient breathes out. Vision was gradually lost, and there is now atrophy of the optic nerve. The diagnosis of cavernous angioma was made on account of the slow devel-

opment, the absence of pulsation, the presence of a faint blowing sound, and especially on account of the power to replace the dislocated globe.

Further Investigations on Trachoma, and Remarks on the Origin of Blepharorrhœa of the New-born and its Treatment. Ber. über d. xiv., Versamml., d'Ophth. Gesellsch. zu Heidelberg, 1882, p. 45.

Sattler has repeated his already-published investigations on the development of trachoma through the agency of micrococci with special reference to Koch's method of breeding them. The culture and inoculation were completely successful, so that these results corroborate the former ones in every respect. As regards the morphology of the micro-organisms, they never assume the shape of chains or form large zoöglœa masses, but are either in small groups, single or double, though when fully developed the separate elements never come into immediate contact, but are always separated by a small interstice. One of the principal characteristics is the extensive subdivision of the trachoma nodule. The trachoma micrococci were bred through several generations. Sattler inoculated the human conjunctiva with micrococci of the third generation, which were purely bred. An eruption of trachoma granules followed, taking a mild chronic course. Only the micrococci of trachoma produce similar granules on the conjunctiva, while other micro-organisms introduced and rubbed into the conjunctival sac, produced no changes.

(To be Continued.)

CORRESPONDENCE.

A Word of Protest.

EDS. MED. AND SURG. REPORTER :—

Dr. Hiram Corson's article on "Blood-letting in the Young," published in your journal of February 2, contains one reckless expression, which seems to me to call for a word or two of protest. As Dr. C. is a physician of experience and standing, his utterances must command attention. Let him be most careful, therefore, to utter no word which may lead a hearer into difficulty.

He has seen fit to pooh-pooh some of the well-ascertained sources of danger that threaten us in our battle with disease. For instance, he does not see how a bubble of air carried along the jugular vein to the heart can cause death; indeed, he does not believe it can. As to how death is brought about in such a case, he is not more ignorant than the rest of us, but that the introduction of air into the organs of circulation may be followed by most alarming symptoms and even death, is a fact long known to our science. Mention is made of it in medical literature of earlier date than the middle of the last century. As an element of risk in surgical operations, Dupuytren

made it a subject of special study, and, since his day, a large number of cases have been put upon record, showing a most remarkable uniformity of symptoms and of post-mortem appearances.

Thirty-five years ago the symptoms of this accident were so well known that Mr. Syme told a jury of inquest that an autopsy was not necessary in order to prove that death had been due to the entrance of air into the anterior jugular vein, through a wound made by a seton needle (A mere puncture was made. The seton was not introduced.)

Death has followed the admission of air into the jugular vein, into the axillary, into the subclavian, into the sub-scapular, and into veins of so little anatomical importance as to be unnamed in the records. Effects more or less alarming have been observed to follow the entrance of air into the veins named above, and into the saphena and facial also.

From experiments on the lower animals, it has been learned that the presence of air in the portal circulation is attended with no untoward effects. In all other situations the effects are proportional to the quantity of air admitted and the rapidity of its introduction. Bretonneau caused death to ensue in half a minute by the forcible introduction of a very small amount of air, accidentally allowed to remain in the syringe with which he was about to inject some pus into the jugular of a dog. Not a drop of pus escaped from the syringe. Experience and experiment show that air may gain entrance into wounded veins which are not kept patulous by any anatomical or pathological condition. Cardiac diastole favors a condition of vacuum in the venous system, as does also the act of inspiration.

Enough has been said, I think, to show that this contingency, though somewhat remote, is quite near enough to merit consideration among the risks of venesection. A sufficient quantity of air to cause death may enter in so short a time, the effects follow with such appalling rapidity, and remedial measures are, so far as my knowledge goes, of such untried value, that it seems to me that no man without this forewarning should, at this day, be licensed to puncture veins. I am aware that this subject is scarcely ever alluded to in lecture courses, and quite as seldom in textbooks. This is a serious oversight. One would rather remain ignorant than learn this lesson from experience, whose teachings are so unforgettable and whose fees are so ruinous. Luckily, preventive measures are always effectual, at least in venesection. Still it is well to remember that he who is often surprised, may be sometimes demoralized.

JOHN S. FULTON, M. D.

Lakesville, Md., February 12, 1884.

—It appears that the suggestion of General Howard to "brand" deserters, which has excited so much indignation on the part of the public press, was totally misapprehended. The recommendation actually made was that after a first offense a distinctive mark should be tattooed (not branded) into the skin at some part covered with clothing, so that the offender should not be allowed to reënlist.

NEWS AND MISCELLANY.

The Bahama Islands for Consumptives.

A correspondent of the *Cinn. Lan. and Clin.* thus writes: The Bahamas are superior to any winter resort of the western hemisphere for pulmonary troubles. I presume they are not surpassed in the world, except by the Madeiras, and not even by them in the winter—only during other seasons of the year. Any consumptive, in its incipient stage, coming and remaining here for two or three full winters will assuredly get well. A patient in the second stage stands precisely an even chance of living or dying, while one in the third stage had better, of course, remain at home to die amongst his friends. The climate is equally as efficacious for nervous disorders, and very good for chronic Bright's Disease. It is not adapted to rheumatic affections but for other chronic maladies, chronic nerve disorders and albuminuria, it is, as before stated, unsurpassed. Of course, it is often difficult to induce patients to come here sufficiently early in the season, to remain here late enough in the spring, or to stay here at all. But that does not militate against the fact that the climate will do almost everything for them if they will be but contented to stay. I advise my patients to remain here till late in March or early April, and then not go home directly, where even at such late date there may still be experienced the rigors of winter. Rather, I recommend them to go to Florida or the Carolinas and work their way gradually northward, reaching the latitude of Cincinnati, perhaps, about the middle of May. The good that a patient has derived from a season here is often obliterated by a sudden transition from Nassau to New York, or some other city situated, perhaps, between 35° and 50° north latitude. In all the Bahamas the climate is, perhaps, equally favorable; but New Providence is usually chosen because it possesses the capital (Nassau) of the group, and because all the comforts of life may be readily and cheaply obtained here. The outlying islands possess so few comforts that an invalid requires, that he must be well enough to "rough it" somewhat ere he attempts to make them his residence.

Here (Nassau) we have the best hotel in all the West Indies, and also a number of excellent boarding houses, where every comfort may be obtained, in the latter at the rate of \$12 to \$15 per week, and at the hotel at about \$3 per day.

British Medical Association.

The fifty-second annual meeting will be held July 29, 30, and 31, and August 1, 1884, at Belfast, under the presidency of James Cuming, M. A., M. D., F. R. C. P. I., Professor of Medicine, Queen's College, Belfast. The Address in Medicine will be delivered by Sir Andrew Clark, Bart, M. D., F. R. C. P., Physician and Lecturer on Clinical Medicine, London Hospital. The address in Obstetric Medicine will be delivered by George H. Kidl, M. D., F. R. C. S. I., Master of the Coombe Lying-in Hospital, Dublin. The Address in Physiology will be delivered by Peter Redfern, M. D., F. R. C. S., Professor of Anatomy and Physiology, Queen's College, Belfast.

Communications in reference to the meeting of

the British Medical Association at Belfast, should be addressed to the Hon. Local Secretaries, John Moore, M. D.; Alexander Dempsey, M. D.; John W. Byers, M. A., M. D.

Visitors going from America to attend this meeting can travel by any of the following routes:

1. A "Cunard" steamer will leave (a) New York on Wednesday, July 16, arriving in Queenstown about the following Thursday week, July 24. (b) Boston on Saturday, July 19, reaching Queenstown the following Monday week, July 28.

2. A "White Star" steamer will leave New York on Saturday, July 12, and on Saturday, July 19; due at Queenstown about July 20 and July 27.

3. An "Inman" steamer will leave New York on Tuesday, July 15; due at Queenstown about July 23.

4. An "Allan" steamer will leave Quebec on Saturday, July 19, arriving in Londonderry about the 26th or 28th of July.

5. An "Anchor" steamer will leave New York on Saturday, July 19; due at Londonderry on July 29.

Londonderry is ninety-five miles from Belfast, and trains run daily between the two places.

The route from Queenstown to Belfast is from Queenstown to Cork, Cork to Dublin (one hundred and sixty-five miles by train), and Dublin to Belfast (one hundred and thirteen miles).

Carbonic Acid and the Devil.

In the *Popular Science News* we read that when Friedrich Hoffmann discovered carbonic acid gas, and traced its effects on animal life, he was denounced by more than one German university as hostile to religion, and verging toward atheism. Three or four students at the University of Jena, in the attempt to raise a spirit for the discovery of a supposed hidden treasure, were strangled or poisoned by the fumes of the charcoal they had been burning in a close garden-house of a vineyard near Jena, while employed in their magic fumigations and charms. Only one was restored to life, and, from his account of the noises and spectres in his ears and eyes as he was losing his senses, it was taken for granted that the bad spirit had destroyed them. Hoffmann admitted that it was a very bad spirit that had tempted them, the spirit of avarice and folly; and that a very noxious spirit—gas, or *geist*—was the immediate cause of their death. But he contended that this latter spirit was the spirit of charcoal, which would have produced the same effect had the young men been chanting psalms instead of incantations; and acquitted the devil of all direct concern in the business. The theological faculty took alarm; even physicians pretended to be horror-stricken at such audacity.

The Cholera Germ.

News from Berlin, dated February 19, states that the German Sanitary Commission which was sent out to Egypt by the Imperial Board of Health to study the nature and causes, etc., of cholera, and which, after finishing its labors at Alexandria, was ordered to continue its investigations in India, has just forwarded a report from Calcutta where it arrived some two or

three months ago. The Commission discovered the cholera germ in a water-tank at Calcutta, and found in the suburban village, where the cholera appeared, the same microscopic organism which had been discovered in the lower intestines of cholera victims in Egypt.

International Medical Congress.

The meetings of this Congress will begin at Copenhagen on August 10. A steamer will leave Hull (England) on August 2 and 9 for Copenhagen; and on August 5 a steamer will leave Leith (Scotland) for Copenhagen. Both these places (Hull and Leith) can be reached on any day by leaving Belfast on the previous evening by the cross-channel steamers. Visitors, after attending the meeting of the British Medical Association in Belfast, will have ample time to travel to Copenhagen for the Congress.

St. Louis Medical Society.

The following gentlemen have been elected officers of the St. Louis Medical Society for the year 1884:

President—G. F. Dudley, M. D.
Vice-President—Le Grand Atwood, M. D.
Treasurer—W. E. Fischel, M. D.
Recording Secretary—H. Hodgen, M. D.
Corresponding Secretary—G. Hurst, M. D.

First Advocate of the Germ Theory.

An esteemed correspondent claims that Prof. Rezin Thompson, of Nashville, was the first advocate of the germ theory in disease. Dr. Thompson died old, poor, and childless some twenty years ago; and if any of our Tennessee subscribers can supply us with particulars of his life and doctrines on this point, other than those contained in his published works, we shall be glad to receive them.

Statistics of a City.

Calling the population of Providence, R. I., 119,405 in 1883, the proportions of births, marriages and deaths to population in that year were as follows:

Births,	1 in 40.85, or 24.48 in each 1,000
Persons married, 1 in 50.76, or 19.69 in each 1,000	
Deaths,	1 in 51.29, or 19.50 in each 1,000

Philadelphia Dental College.

The twenty-first annual commencement of the Philadelphia Dental College took place at the Academy of Music on Friday, February 29. The address to the graduates was delivered by Prof. S. H. Guilford, and the valedictory by Edgar L. Gardiner. There were sixty-five graduates.

Items.

—The Philadelphia Clinical Society admits women to membership.

—Dr. H. H. Williams, of Johnstown, Pa., reports, in the *Medical Record*, a case of a man with three testicles.

—James H. Frey, wholesale druggist of Baltimore, Md., left in his will about \$60,000 to various religious and charitable institutions.

—Dr. Henry L. Sabin, for fifty-six years in practice at Williamstown, Mass., and the oldest trustee of Williams College, died in that town February 25, aged eighty-three years.

—On the occasion of the fourteenth annual dinner of Bowdoin College Alumni Association of New York, held at Delmonico's February 14th, Dr. Fordyce Barker was re-elected President.

—An amendment to the By-Laws of the Philadelphia County Medical Society has been introduced, and will be acted on in April, which provides that the members of the Society shall be regular male physicians.

—Dr. Lesnewich reports, in the *Paris Médical*, the case of a male infant, aged ten months, that secretes milk in considerable amount. The infant has, for its size, well developed mammary glands.

—One day Prince Bismarck, walking in a park, stood for a few minutes on an ant's nest. Hurrying home, he reported that he believed he had a bad case of trichinosis—he could feel the horrible things crawling through his system.

—"I have no objections," said a Chicago alderman, gravely, in speaking of the proposition to tax the druggists of the city \$500 per annum each; "I have no objections to druggists selling without a license on the subscription of a physician."

—Of vivisection Pasteur says: "Never should I have the courage to kill a bird for sport, but when it comes to experiments I have never been troubled by the slightest scruple. Science in that case has the right of pleading the sovereignty of the purpose."

—A new antiseptic termed "antibacterid," recently patented in Germany, consists of a solution of 338 parts of borax, and 198 parts glucose, in a minimum quantity of water. To this solution is added 124 parts of boracic acid, and the mixture is evaporated until solid.

—The Trustees of the College of Physicians and Surgeons, of New York, have elected Dr. John C. Dalton, for so many years Professor of Physiology, President of the College, in place of Dr. Alonzo Clark, who has resigned. Dr. John G. Curtis now holds the chair of Physiology.

—A *Lancet* correspondent quotes from the *Hygiène Pratique* that boots and shoes may be rendered water-proof by soaking them for some hours in thick soap-water. The compound penetrates the leather, and there forms a fatty acid which renders it impervious to water.

—It is said that Berlin has one drug store to every 16,266 inhabitants; Breslau, one to every 13,000, and Cologne, one to every 11,000. Compare these ratios with that of Chicago, where the proportion is one drug store to about every 1,500 inhabitants, and with St. Louis, Milwaukee, Detroit, Cincinnati, and other Western cities, where, we believe, the ratio is still larger.

—First Country Doctor: "Could you come to my place, Brown, to-morrow morning?"

Second C. D.: "All right, old man. What is it?"

First C. D.: "Well, I've had a case of endocarditis which I've very successfully treated with *convallaria majalis*, and I want your help with the post-mortem."—*Punch*.

THE MEDICAL AND SURGICAL REPORTER.

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[Vol. L.—No. 11.]

ORIGINAL DEPARTMENT.

LECTURE.

CLINICAL LECTURE ON DELIRIUM TREMENS.

BY B. BALL (PARIS).

Translated by Dr. A. A. Gleason.

(Continued from page 291.)

But if delirium tremens has its furies, there exists a much more violent form, in which agitation and foolish volubility take the place of the more dramatic incidents, the picture of which has just been traced.

During his incessant foolish recitals, the patient dreams of his habitual occupations; he believes himself in the saloon with his friends, or, perhaps, in the work-shop surrounded by workmen, he gives his orders, he directs imaginary work, he commands those about him, but without presenting, as in the preceding case, that excessive super-excitation, which resembles acute delirium.

There remains a characteristic which is found in all the forms of alcoholic delirium: it is the possibility of snatching the patient for a moment from his thoughts, and of obtaining from him a clear response to a definite question.

This waking lasts but an instant, but it has a capital importance for the diagnostician. It shows us, in fact, that, like the subject plunged into the *first delirium* of typhoid fever, the patient comes to reason for an instant when he is strongly solicited. A moment after, he falls again into his eternal monologue.

To these psychologic troubles, convulsive accidents are added; we remark the trembling first

of all—the importance of which is such, that, by good right, it occupies a place in the definition even of the disease.

The trembling may affect the hands, the superior and inferior members, the tongue, the lips, the muscles of the face; in short, in certain subjects the trembling is generalized. In applying the hand to the forearm, we feel the *subsultus tendinum*, which does not leave the patient a moment's rest.

Among the consequences of these motor disorders, we should note the embarrassment of speech, which may sometimes resemble general paralysis. Note, also, the unsteadiness of step and the impossibility of executing with the hands a slightly complicated motion, such as the act of drinking. All these phenomena are aggravated in an evident manner when the subject makes the least effort.

Among the general troubles which make a part of this procession of symptoms, one of the most striking is the profuse sweating, viscous and foetid, and often exhaling an alcoholic odor. As a compensatory phenomenon, the urine is scanty and red. Generally, there is constipation. The pupils are habitually contracted, but in certain cases they show a very marked inequality. In certain subjects a typhoid state remains, and sordes form on the tongue, the lips, and the teeth. The pulse is feeble, small, sometimes irregular, and often accelerated. According to Copeland, it may reach a hundred and twenty pulsations.

Amidst all these phenomena the temperature remains low enough; delirium tremens is an essentially apyretic affection, and if there exists a change in temperature, it is mostly in a sense of coldness, principally in the extremities.

There exists, however, a febrile form of delirium tremens to which Prof. Laseque, and more recently M. Magnan, have called attention.

In this form the temperature may be raised to 40° to 41° (Centigrade), and even in some exceptional cases to 43°.

This state is accompanied by dynamic phenomena, and the patient often sinks into coma.

According to foreign authors, the febrile forms of delirium tremens are in reality cases of acute delirium.

However, delirium tremens is recovered from in the majority of cases; its habitual duration is from three to eight days; in exceptional cases it may be prolonged to twenty, or even thirty days. The first phenomenon which announces healing, is the return of sleep.

There remains for us now to speak to you of the diagnosis and prognosis, the anatomical lesions of delirium tremens, and finally of the treatment which may suit it.

Diagnosis. In the presence of a typical case, offering at the same time psychological characteristics and the trembling which characterizes the disease, doubt does not seem admissible—above all, if the antecedents of the patient are known; and nevertheless there are cases where the signs of this disease may be the mark for an absolutely different visceral lesion. We cite principally pneumonia, typhoid fever, and acute meningitis.

Pneumonia, always serious in alcoholics, is one of the most frequent causes of delirium tremens; and what singularly augments the difficulty of diagnosis in such a case, is the absence of the complete signs of the disease. Neither the tenacious expectoration, nor the general prostration, nor the ordinary signs furnished by auscultation, are present to enlighten the physician, who besides cannot, by reason of exciting the patient, make a regular physical exploration.

The complexity of symptoms is then reduced to violent delirium, loquacity, accompanied by fever, sometimes by dyspnoea. However, we understand that by its action on the medulla, and by its elimination through the respiratory organs, alcohol may compromise hæmatosis, and even trammel the respiratory movements.

The diagnosis is often very difficult, even while taking into account the antecedents of the patient; and often it is the autopsy which comes, as a last resort, to adjudge the question.

As to typhoid fever, it is above all by the predominance of the abdominal symptoms that the physician recognizes the disease, which formerly, we know, gave rise to frequent deception.

Acute meningitis gives rise to accidents more clearly localized than those of delirium tremens. Contractions and paralytic affections are seen—occulo-pupillary disorders are present, intense headache, sometimes even vomiting—phenomena which are habitually foreign to acute delirium; it is the imperfect and insidious forms of meningitis whose undecided type leaves the observer in great embarrassment.

It may easily be confounded with delirium tremens. We do not seek to indicate the rules of diagnosis for each case in particular; let it suffice us to say that the antecedents of the patient, and the evolution of the disease, when it is carefully observed will in general allow us to recognize the truth.

There remains for us to speak of the affections which enter more specially into the scope of our studies.

General paralysis in its outset, encephaloid hypochondria, and above all, acute mania, may very often in their initial phases resemble delirium tremens. However, in a like case, we meet with less marked trembling with less profuse sweating, delirium less rich in hallucinations, a less absolute insomnia. All these characteristics are but relative; and we may say in general, that these affections are easily enough distinguishable from delirium tremens when their acuteness is moderated. In extremely grave cases all the elements of the drama are mingled, and it becomes almost impossible to separate the truth.

But, it is acute uræmic delirium which presents the closest analogies to delirium tremens—above all, when this latter is accompanied by fever. The symptoms may then present such a resemblance that it is only by reliance on the cause that the distinction may be established.

For the rest, acute delirium is an affection the outlines of which are not yet clearly enough traced to limit its domain with absolute precision.

Prognosis.—Delirium tremens has a grave prognosis. It is estimated that the issue is fatal in a proportion of 15 per 100.

Death comes usually during convulsions or coma. In the adynamic form the patient succumbs to a state of absolute prostration. Finally, certain patients die suddenly amidst the most violent agitation. (Marcé.)

Cure is the rule. It is announced, we have said, by the return of sleep, then by the successive amendment of the principal symptoms.

The agitation diminishes, the disorders of motility are effaced, the general delirium is calmed, and the patient returns gradually to the normal

state, sometimes after a short time, sometimes on the contrary after a prolonged delirium, whose traces remain for a sufficiently long time. There is a third mode of termination, which is met with frequently enough in subjects who present already a predisposition to insanity. Dementia and mental alienation may succeed, either directly or at a period more or less removed from an attack, and above all, after two or three attacks of delirium tremens. Let us add, finally, that relapses augment sensibly the gravity of the prognosis, and that the older the subjects are, the more chronic is their alcoholism, the more their general health is enfeebled, the more also do they find themselves exposed to the serious terminations that we have just indicated. On the contrary, a young man, vigorous and quite well, resists more easily the invasion of the disease, and may support more easily its consequences.

Pathological anatomy does not furnish in respect to this disease very scientific results, when we limit ourselves to the consideration of cases exempt from all complication.

A manifest congestion of the meninges and the cortical substance, a sufficiently characterized œdema of the pia mater, sometimes rudimentary adherences of this membrane with the cortical convolutions (as in acute delirium)—in short, a despoiled state of the membranes and a sufficiently marked lymphatic stasis—are almost the only lesions that may be attached with certitude to the disease with which we are now occupied.

The other alterations that have been proved—pachymeningitis, encephalitis, the presence of alcohol in the cerebral substance—are common to all forms of alcoholism, and present no particular significance.

Treatment.—The treatment of delirium tremens, about a half century ago, appeared to be admirably simple. Avoid sanguineous depletions, administer opium in large doses; such was the universal rule, and we can not deny the good effects of such treatment, in a great number of cases; but we know to-day that we must establish, in this respect, very narrow categories, and that it is impossible to apply the same medication indiscriminately to all diseases.

And first, when an alcoholic subject falls sick, the physician, if he knows the antecedents, should interdict all depressing treatment; no bleeding, no dieting, and above all no deprivation from alcohol; otherwise, we risk the provocation of an explosion of delirium. We should, on the contrary, tone up the patient and sustain him in as great measure as possible.

But finally, in spite of all precautions, the delirium breaks out; we may then find ourselves in the presence of three very different sorts of subjects.

Let us suppose ourselves called to a patient, young, free from all vascular or cardiac lesions, and showing no elevation of temperature. In such a case, opium is completely indicated; it must be administered in doses of several centigrammes, and we may also have advantageous recourse to subcutaneous injections of morphine.

We may join chloral to this treatment, especially if the agitation is great; finally, the patient must be sustained by the generous administration of wine and various alcoholic drinks. Chloroform and digitalis have both been employed. The first of these two remedies appears to us dangerous. As to the second, it is mainly when there is great feebleness, and an intermittent pulse, that it is indicated. We would never prescribe it in the enormous doses which have been employed in England (twenty-six grammes of the tincture of digitalis in ten hours). That, as we think, is a dangerous game.

Here, now, is a different—very different—case; the patient attacked by delirium tremens presents at the same time a visceral complication—a pneumonia, for example. In this case chloral is absolutely contra-indicated, opium should be administered with prudence; but we must, above all, insist upon tonics and diffusible stimulants, such as the acetate of ammonia; finally, have recourse to digitalis, if the character of the pulse indicates its use.

We must reserve a separate place for febrile delirium tremens, above all when it accompanies an adynamic state.

Narcotics are then formally contra-indicated; we must have recourse to tonics, to stimulants, to alcohol, and to anti-spasmodics, such as ether, camphor, and musk. Certain authors have recommended the acetate of zinc. Our personal experience furnishes us with no knowledge in regard to it.

COMMUNICATIONS.

THE OLEATES IN CUTANEOUS DISEASES.

BY HENRY W. STELWAGON, M. D.,

Instructor of Dermatology in the University of Pennsylvania, etc.

Attention was first directed to the existence of oleic acid about 1811, by Chevreul, and some mention of the oleates may be found in the pharmacy

of France of that time. The earliest English paper on the subject was by Attfield, in 1862.* It was not until the paper by Mr. John Marshall† was published, in 1872, that much interest was awakened in the subject. Since that time several communications on the oleates, both as regards their pharmacy and therapeutics, have appeared in the current medical literature.‡

The oleates must be looked upon as valuable additions to our means of treating diseases of the skin, and although they do not answer in all cases, or supplant the older and tried methods of dermic medication, yet they have proven of such value in a number of instances as to warrant their further trial and experimental use.

There are two methods of preparing the oleates, each of which has its advocates. The older method is by the direct combination of oleic acid with the base. The new method is by double decomposition, the oleate of sodium with a neutral metallic salt. Unquestionably the preparations by the latter method are, in appearance at least, superior to the older oleates; in regard to the therapeutical effects, they are also probably better, although excellent results may be secured with the preparations made by the older method. It is highly probable, however, that the method of manufacture by double decomposition will entirely supplant the old process.

Introductory to the consideration of the individual preparations, the following notes on the manufacture of oleic acid and the oleates may prove of interest:

First as to the preparation of oleic acid. One of the best and cheapest methods of preparing it is as follows: The oil of sweet almonds is saponified with the oxide of lead, having an excess of oxide of lead present so as to be sure of complete saponification of the oil. The product so obtained is put in benzine, which dissolves the lead oleate, while the lead palmitate is deposited. The solution of the lead oleate is decanted and shaken with diluted hydrochloric acid (1 to 7); this separates the lead chloride and leaves a benzine solution of oleic acid, which, after the expulsion of the benzine, gives an acid that is well adapted for the manufacture of the oleates. The oleic acid so obtained is of a light-yellow color, readily mis-

cible with 92 per cent. alcohol in all proportions without causing turbidity. (Wolff.)

The oleate of sodium may be obtained by saponifying the acid with caustic soda. A solution of this and a solution of a metallic salt brought together, will give a precipitate of the oleate.

As this method of obtaining the oleates by double decomposition is, however, somewhat expensive, the following method may be employed: One part of castile soap (sodium oleo-palmitate) is dissolved in eight parts of water; this is allowed to stand for twenty-four hours, when there will be a considerable deposit of sodium palmitate. The supernatant liquor containing mostly sodium oleate, is drawn off and decomposed with a concentrated solution of a metallic salt, which, if obtainable, should contain no free acid to prevent the formation of free oleo-palmitic acid. The heavy deposit of oleo-palmitate so derived is strained off, pressed out in the strainer, and the adherent water evaporated over a water-bath; afterwards it is dissolved in about six to eight times its quantity of petroleum benzine, and the insoluble palmitate is left to subside while the solution of the oleate decanted therefrom is filtered off. The benzine evaporated will yield an oleate that is a chemical combination, and one that will remain stable and efficacious. (Wolff.)

The oleates, whether made by the direct combination of the acid with the oxides or by the process of double decomposition, are fixed salts, and the designations of five per cent., ten per cent., etc., oleates, are misnomers, and wholly incorrect. The so-called per cent. oleates are solutions of the oleates in free oleic acid; for example, the so-called ten per cent. oleate of mercury is so named for the reason that ten parts of mercuric oxide are added to ninety parts of oleic acid, and combination allowed to take place. The oxide, however, only requires a certain proportion of the ninety parts of the oleic acid for the production of the oleate, so that there must be a considerable quantity of the acid which is not needed for the combination; in other words, the so-called ten per cent. mercuric oleate (and the same applies to the other per cent. oleates) is a solution of the oleate in free oleic acid.

It will be readily seen that this manner of speaking of the oleates, therefore, is not only misleading, but erroneous, and should be discarded. If a diluted oleate is required for application it may be ordered in the same manner that all dilutions are prescribed—so much of the oleate and so much of the diluent.

It is not my purpose to present in detail the

* *Pharmaceutical Journ. and Trans.*, 1862-3, vol. 4, p. 388.

† *Lancet*, May 25, 1872, p. 709.

‡ Crocker: *Medical Record*, 1879, p. 123; Wolff: *Amer. Jour. of Pharmacy*, Jan., 1879, p. 5; Nov., 1883, p. 445; Shoemaker: *Trans. Penna. State Med. Soc.*, 1879, p. 707; *Medical Bulletin*, July, 1882, p. 584; Squibb: *Ephemeris*, No. 6, Nov., 1882, p. 152.

chemistry and pharmacy of each particular oleate, as the foregoing remarks, with the subjoined table, showing the percentage of base in each salt, will give an insight into their mode of manufacture and composition :

For all syphilitic eruptions, ulcerative or non-ulcerative, and especially the later and localized manifestations, the local use of an ointment of this oleate is an excellent adjuvant to the constitutional treatment; it should be applied and

<i>Salt.</i>	<i>Base.</i>
Aluminium oleate contains 3.1	% metallic aluminium equivalent to 17.9 % aluminium hydrate.
Arsenic oleate “	8.16% metallic arsenic “ 21.5 % arsenious acid.
Bismuth oleate “	19.9 % metallic bismuth “ 44.3 % bismuthyl oxide.
Copper oleate “	10.1 % metallic copper “ 12.8 % cupric oxide.
Iron oleate “	9.04% metallic iron “ 11.5 % ferrous oxide.
Lead oleate “	26.7 % metallic lead “ 29.2 % plumbous oxide.
Mercury oleate “	26.2 % metallic mercury “ 28.35% mercuric oxide.
Quinia oleate “	57.2 % quinia.
Silver oleate “	27.6 % metallic silver “ 59.3 % silver oxide.
Zinc oleate “	10.4 % metallic zinc “ 12.9 % zinc oxide.

Oleate of Mercury.—In color, yellowish, somewhat adhesive, and of the consistence of ointment, with an oily odor. If pure, diaphanous and of a yellow color, but generally found of a grayish or greenish hue, showing the separation of mercurous oxide and metallic mercury, which will be found ordinarily at the bottom of the vessel containing it.

Applied to the sound skin, this oleate produces more or less redness and irritation, and if its use is continued, may cause a dermatitis. It is rarely prescribed in full strength, but usually one part to from one to three parts of oleic acid or lard. One part of this oleate to two parts of oleic acid will give a preparation about similar in strength to the so-called ten per cent. oleate. Of all the oleates, this is not only the most important, but one that has been long in use.

It has its principal field in the treatment of syphilis by inunction, and when employed for such purpose is efficient and cleanly, completely supplanting the old method of inunction by blue ointment. For this purpose, the oleate should be diluted with oleic acid, lard, or a combination of the two. A prescription made up as follows will answer admirably:

R. Hydrargyri oleatis,	3 iij.
Acidi oleici,	3 ij.
Cerati simplicis,	3 iij.
Pt. ugt.	

A portion of this ointment of the size of the terminal joint of the forefinger suffices for an inunction. For each application a new surface should be selected. As the oleate ointment is more irritating than the old mercurial ointment, and as it is, also, more readily absorbed, less friction should be employed, and the hairy and more delicate portions of the skin should, as far as possible, be avoided.

gently rubbed into each lesion. The ointment given above may be used; ordinarily, an ointment made up of one part of the oleate to four parts of benzoated lard will be found sufficiently active.

Another disease, in some cases of which this oleate seems to act almost as a specific, is chronic ringworm of the scalp. As a rule, it is, I think, more reliable than any other remedy, failing at times in obstinate cases, as do all other remedies, but in the majority of instances curing. In recent cases, a twenty per cent. ointment or solution will be effective; if the disease has existed a long time, a thirty, or even forty per cent. ointment may be employed. It is to be well rubbed in twice daily, and the head to go unwashed for a week or longer. Treatment, if it is to be permanently successful, must be continued for several months. Epilation, as in all other plans of treatment, is to be persistently practiced. A combination which will be found useful in these cases is the following:

R. Hydrargyri oleatis,
Picis liquidæ, āā ʒ ij.
Ugt. sulphuris, ʒ iv.
Ft. ugt.

It is to be applied morning and evening. As there is a tendency to chemical change, a quantity sufficient for a week or two only should be made at one time.

In all skin diseases in which ointments of red precipitate, white precipitate, and calomel are employed, this oleate, properly weakened, may often be substituted with advantage.

All indurations, swellings, and glandular enlargements, may occasionally be favorably influenced by applications of a mild solution or ointment.

In pediculosis capitis, and more especially in

pediculosis pubis, a twenty-five per cent. ointment of this oleate will often prove curative.

The mercury oleate, in some instances, may be advantageously combined with the other oleates.

Oleate of Zinc.—Dry, white, pulverulent, impalpable powder of a soapy touch, resembling powdered soapstone; if pure, should make a clear solution with oils, lard, etc., over a water-bath. It may be used either as a dusting powder or as an ointment. An ointment of one or two drachms to the ounce of cosmoline or any fatty base is most commonly used. Sometimes the oleate made up in ointment form with oleic acid seems to be more efficacious. A very good way of prescribing it is as follows :

R.	Zinci oleatis,	
	Acidi oleici,	āā 3j.
	Petrolati,	
	Cerati simplicis,	āā 5 iij.

Ft. ugt.

To a great extent this oleate replaces the oxide of zinc, and may be ordered whenever that substance is indicated. Acute vesicular eczema may be successfully treated with the application of black wash and the subsequent application of an ointment of oleate of zinc; the wash is to be applied with a sponge or soft rag for several minutes two or three times daily, after each application has dried, a small quantity of the ointment being gently rubbed over. In some instances, the disease seems to be more favorably influenced by the oleate employed as a dusting powder. When such is indicated, the following will prove an eligible formula:

R.	Pulv. zinci oleatis,	
	Talci veneti,	āā 3 iij.
	Amyli,	3 ij.

M.

This is to be dusted over the parts several times daily. The same plan of treatment is frequently of advantage in all weeping eczemas. In intertrigo, a dusting powder, such as given above, is very comforting. This oleate makes a harmless toilet powder, and combined with talc and calamine, as in the formula below, will make an excellent powder for such purpose :

R.	Calaminæ præparatæ,	3 ij.
	Talci veneti,	
	Zinci oleatis,	āā 3 vij.
	Olei rosæ,	q. s.

M. S.—Toilet powder.

This last may also be employed as a dusting powder in moist eczema and similar inflammations.

Oleate of Lead.—Yellowish-white in color, much resembling lead plaster, but somewhat harder and more brittle. A good ointment is made by melt-

ing with an equal part of oleic acid, vaseline, or lard; as such it makes an excellent substitute for Hebra's litharge ointment, and will keep for an indefinite time. It is protective, astringent, and sedative, and may be prescribed whenever such an ointment is called for. In acute and subacute eczema its use is followed at times by rapid improvement. In the more chronic and sluggish forms of the disease, a proportion of oleate of mercury may be added to advantage. In order to secure a rapid and positive effect, the ointment of lead oleate should be kept constantly applied as a plaster, changing twice daily. In abrasions, erysipelas, and similar inflammations, the oleate ointment exerts a prompt and beneficial effect, reducing the inflammation and relieving pain and irritation. In dermatitis venenata an ointment of the oleate, such as mentioned, allays the intense burning, and frequently affords relief. In that troublesome affection of eczema of the nares, where slight fissuring and pustulation take place, it will occasionally be found useful. In sycosis non-parasitica, the following formula will often prove of advantage :

R.	Zinci oleatis,	
	Bismuthi oleatis,	āā 3j.
	Plumbi oleatis,	3 ij.
	Adipis,	3 iv.

Ft. ugt.

This is to be applied to the parts twice daily, after thorough cleansing with warm water.

In eczema about the anus, this oleate ointment sometimes gives relief. Vesicular eczema of the hands may often be rapidly relieved in the following manner: The parts are to be soaked in hot water for ten minutes, carefully dried with a soft towel, and then are to be covered with pieces of muslin thickly spread with the ointment. The application is to be renewed morning and evening; at each renewal the loose scales, crusts, and epiderm are to be gently rubbed off; no force should be employed, otherwise more harm than good will result. Treatment is to be continued for several days, at the end of which time the hands will be vastly improved. So much accomplished, a small quantity of calomel may be added to the ointment, and instead of applying it in the form of a plaster as before, it should be gently rubbed in two or three times a day. It is well to remark that although the disease is quickly brought into a favorable condition by the plan of treatment just mapped out, the progress thereafter is not so rapid.

Oleate of Bismuth.—Pearly-gray in color, smooth, and of the consistence of ointment, and should show no trace of suspended solids when rubbed

these diseases, may corroborate the favorable impression already formed. The ointment which I have employed in the few cases referred to is the following:

R. Quiniaz oleatis,		3 ss.
Adipis benzoat.		
Petrolati,	āā	3 ss.
Ft. ugt.		

A small quantity of this ointment is to be rubbed in every evening, or less frequently, as may seem indicated.

In addition to the oleates already named, there are several others which have been employed in cutaneous diseases; but either they have failed to show any therapeutical effect, or experience in their use has been so limited as to make special mention of them at the present time unnecessary; these are the oleates of tin, antimony, nickel, cadmium, etc. The oleates of the alkaloids, morphia, aconitia, veratria, etc., are important, but as their use is confined to other than cutaneous medication, they fall beyond the scope of this paper.

Recapitulating, I may say that of all the oleates so far introduced for the treatment of diseases of the skin, the following may be considered as possessing therapeutic powers which experience has attested: Oleate of mercury, oleate of zinc, oleate of lead, and oleate of bismuth. The other oleates have as yet failed in adequately supporting any attested claim to curative powers; further experience in their use may, however, prove them worthy of a permanent place in dermic therapeutics.

In ordering the oleates, several points are to be kept in mind. If the action of the proposed ointment is to be mainly protective, then the oleate is best made up with one of the paraffinates; if there is to be a certain amount of penetrating power along with a protective influence, then a mixture of lard or oleic acid with a paraffinate is to be prescribed as the base of the oleate ointment; again, if absorption is the main point aimed at, then the oleate compound should be made up of lard, oleic acid, or a combination of the two.

In some cases (and they are by no means few) the oleates are found to disagree; instead of an improvement, a slight or marked aggravation occurs. In not a few instances this may be due to the bad quality of the oleate used; but that it may occur with oleates which are of the best manufacture, is beyond question. Oleates, if properly prepared, will keep almost indefinitely; but if prepared in the old way, with an excess of

oleic acid present, they will frequently be found to deteriorate.*

In conclusion, it may be said, as already stated in the first part of the paper, that the oleates are to be considered merely as additional means of treating cutaneous diseases, and are in no sense to be looked upon as panaceas, for often enough they must be discarded to give place to the older and tried methods of dermic medication.

APPARATUS FOR FRACTURE OF THE OS FEMORIS.

BY E. MICHENER, M. D.,

Of Toughkenamon, Chester county, Pa.

Since the publication of my paper on this fracture in the REPORTER, I have received so many applications for further information of my method, that I am willing not only to make that information more accessible, but now, after sixty years' experience in its use, to recommend it as superior to most of the methods usually practiced.

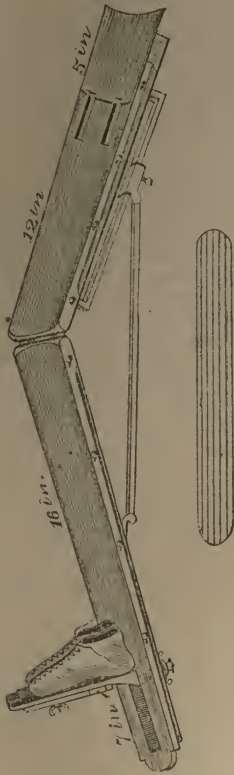
The idea was suggested, in part, by Amesbury's apparatus. The accompanying illustration is so plain as not to need much explanation of either its construction or application.

The major splint is made concave to receive the limb, then cut in two and united by hinges. These are held in position, at any desired angle, by the sliding brace and binding screw. The brass slide, secured by screw-bolts, serves to adapt it to the length of the thigh. At the foot a sliding standard is seen, carrying an adjustable laced shoe. Four brass buttons on each edge of the splint above the knee, and as many below, for the binding straps, and it is completed. These minor splints, from two to three inches wide, conveniently made by gluing narrow strips of light wood on muslin, and long enough to reach from the condyles to the top of the thigh; a bandage of strips made of strong muslin; padding for the splints; and eight pairs of straps of strong, unyielding leather, with buckles, complete the outfit.

After having carefully adjusted the fracture, and waited to see that no retraction takes place, remove the foot-gear, set the splint to the proper angle, and adjust the length of the thigh-piece by the well limb, so as to press against the ischium. Apply a few folds of soft flannel for a pad, and lay down the bandage of strips, or, as I prefer to do, apply the bandage when the fracture is reduced.

*L. Wolff & Co., Philadelphia; Theo. Metcalf & Co., Boston, and Parke, Davis & Co., Detroit, have furnished me with oleates well prepared and of good quality.

If found more convenient, the limb may be laid on the splint straight, and flexed afterward. The minor splints, either padded or rolled in flannel, are next applied, and the leather straps buckled firmly and as tight as the limb will bear. This completes the essential dressing.*



My purpose is to make a permanent, strong, steady, and even pressure on the entire tissue of the thigh, and the thigh only. It effects two important ends: 1. The muscles immediately lose their natural tendency to contract, avoiding both suffering and shortening; 2. It leaves both the hip and knee joint free to respond to any necessary or accidental movement of the patient. The reflex motion is received by the free joints, in place of the more fixed fracture-joint. My success, I believe, has depended upon these factors in the treatment. I have never used mechanical extension, more than what the angular splint may be supposed to afford.

The foot requires little—a stocking and support in or out of the shoe, and the avoidance of under-pressure on the heel.

*In irritable subjects, a bandage from the foot to the knee helps to quiet muscular disturbance.

For children, from infancy up, I have used extemporized splints made by cutting a shingle in two and nailing it on an angular block. This has always given satisfactory results.

The apparatus is equally adapted for injuries of the leg, and readily admits of lateral splints when required.

HOSPITAL REPORTS.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Constitutional Syphilis.

Patient was admitted November 12; is twenty-five years of age; unmarried. The family history is negative. Five years ago, after a suspicious connection, he says he had a large chancre on the right side of the dorsum of the penis, just beyond the glans. No symptoms of constitutional syphilis followed. Two years ago he had several additional sores on the penis, and the glands of the groin became enlarged; but these were painted over with iodine, and they soon subsided without breaking or suppurating. Three months ago he had a small sore at the meatus, and another about half an inch inside of the urethra. For this he was treated with injections of nitrate of silver, and with various patent remedies. The ulcer within the urethra was painful, but he does not know whether there was any induration about it or not. Two months ago he began to experience violent shooting pains in his joints, which radiated along his limbs. Six weeks ago a profuse pink macular eruption broke out on his chest, abdomen, back, buttocks, and extremities. There have been several similar crops since. He says there was also some eruption two years ago, but these sores were larger, and were elevated, and exuded a fluid which dried upon them and formed scabs. He has had one or two ulcers on the left leg and on the patella, the scars of which are still visible. On admission, his pulse was 75, respiration 18, and temperature 99.4°. There is at present an abundant, copper-colored, papular eruption extending over the face, trunk, and extremities; and on close inspection, numerous small pits or cicatrices are observable.

Gentlemen, in the clinical history of syphilis there are four stages, each marked by peculiar characteristics. There is first a period of incubation, during which there are no symptoms; second is the stage of primary lesions, or the period of the chancre; the next is the stage of secondary lesions, when the general eruption appears; and the fourth is the tertiary period, or the period of gummy growths, and visceral lesions. You noticed in taking this man's history that I was careful to locate accurately the time at which he had his last chancre. And I find that the general eruption, which he now has, appeared at just about the right length of time after the primary lesion, to show that it is a secondary manifestation of the disease. But the particular point of in-

terest in this case is the fact that the man thinks that he has had syphilis before. For he says that he had several sores, and a bubo two years ago. But it is not clear to me now that he has had syphilis before. The theory is, that a person who has had it once can not have it again, that he is protected from further attacks. I do not remember any case recorded of a second attack of syphilis. This man certainly had a sore on the penis, which was regarded as a chancre; but I must admit that I do not think that it was an infective chancre, for the man is now suffering from the secondary eruption of constitutional syphilis. You see, upon a close examination, that there are numerous small depressions on his skin. Now I am willing to assert with great positiveness that these are not the cicatrices of a former syphilitic eruption, but that they are the cicatrices of an acne which has been produced by the use of the iodide or the bromide of potassium. You know that there are certain drugs, which when given in small repeated doses, will produce in many persons a violent form of acne. And following this eruption you get just such cicatrices as these, which indicate that there has been a follicular eruption accompanied by a loss of tissue. We will probably find that this man was formerly treated with potassium iodide for his supposed syphilis, and these follicular cicatrices are the result. I infer, then, that it is pretty sure that this man never had constitutional syphilis, although he had had two chancres, until he contracted the chancre three months ago. So this is a very good case in favor of the theory of the dualists, that there is an infective and a non-infective virus. We can not say that this man was not susceptible to the syphilitic virus, for if this were so, he would have escaped infection from his last sore also. So we must conclude that his former chancres were of a different character from the one which appeared three months ago.

A noticeable and important feature of this last chancre was that it was located within the urethra, and was what is called a concealed urethral chancre. You will often find manifestations of constitutional syphilis in patients who cannot remember that they ever had any primary sore. They may be honest in their statements, but there are cases where the primary ulcer has been deeply seated within the urethra, and it may have caused a urethral discharge resembling that of gonorrhœa, for which they mistake it. And so they do not dream that they have constitutional syphilis until they get the secondary eruption, or perhaps not till they come to the period of gummy growths.

The history of this man's present disease is a classical history of syphilis. There is only one point lacking, and in relation to this he cannot inform us. It is the length of the period of incubation, from the time of the suspicious connection to the appearance of the local sore. This is often difficult to make out, because the patient is unable to individualize the occasion on which he became infected with the virus. But in a great many instances the occasions for exposure to this accident are so rare, that it is easy to determine the length of the period of incubation. The usual period is found to be between two and four weeks, or from eighteen to thirty days, the aver-

age being about three weeks. But the chancreid or non-infecting sore has no period of incubation. It may appear the next day, or two or three days after exposure. This is a capital distinction between a true syphilitic and a non-infective sore. Another distinction is that the infecting sore is generally single, while the non-infecting are often multiple. Both may be accompanied by an adenitis, but that due to the infecting sore is not attended by a suppuration of the glands; and it is a general adenitis involving especially the posterior cervical glands, and the chain of glands running down the arms, as well as those in the groins. And many other glands in numerous other places will be found to be enlarged and indurated. But the adenitis of the non-infecting chancreid is a single unique adenitis, due to a localized inflammation, which has extended to the chain of glands in the immediate vicinity of the sores. And here the inflammation is liable to go on to suppuration, which is the converse of what occurs in the generalized adenitis of the unique sore. In this man you can easily appreciate the generalization of the adenitis.

The generalized eruption of the secondary stage usually appears in from one to three months after the appearance of the chancre. And the period of its continuance varies very much. It may be six months, or one or two years. And often a much longer period will elapse before the appearance of the gummy growths characteristic of the tertiary period of syphilis. The characteristic eruption of the secondary period is of the erythematous variety, and it only involves the superficial vascular layer of the derma, and is thus analogous to the eruptions seen in scarlet fever, measles, and other exanthematous fevers. It may occur not only on the integument, but also on the mucous membranes, and it may be accompanied by a slight exudation from the papules, which are sometimes present. For we may get papules as well, and in all degrees. Or the eruption may be purely papular, or purely erythematous. Or it may be but scantily developed, or profusely generalized over the whole surface. As a rule the erythematous element is the more pronounced, however, while the exudation element is inconspicuous. This man has a very marked eruption on his face, which you might mistake for that which is found in German measles or in ordinary measles; and besides there is a little coryza, and irritation about the eyes, which are suffused, as is common in measles also. And when you come to look at the surface of the body generally, there too the eruption is suggestive of measles; for the spots almost disappear under pressure though not entirely, for a slight staining remains. There is also here a slight elevation of the eruption above the surface. But you observe that the eruption here is much more marked upon the back, and it has here a peculiar character which might excite your suspicions of its being of syphilitic origin. That is the fact that it is of a decidedly coppery color. You should not, however, lay too much stress upon the presence of an eruption with a coppery hue. And still another point, which will assist in diagnosing this eruption from that of measles, is the much greater length of time that this persists.

Sometimes the eruption does not occur upon the face and limbs, but it is confined to the an-

terior surface of the body. And in some patients it may be so insignificant as not to be noticed at all, and so they may not be cognizant of the fact that they have constitutional syphilis.

But it is not only the eruption and the adenitis which indicate the character of this man's disease, but it presents another interesting feature at this period of its development, and that is fever. Though his temperature on admission was only 99.4^o, and this morning it was normal, yet I will assume, and I am safe in assuming from the amount of the eruption present and the severity of the pain of which he complained, that he had already had considerable fever before coming here. In many of these cases of constitutional syphilis the period of the generalized eruption which follows the local manifestation of the disease, is ushered in or accompanied by a febrile movement of more or less severity. This is the period of so-called syphilitic fever, and thermometrical observations will generally show its presence. And it manifests itself not merely by elevated temperature and other objective signs, but also by the subjective phenomena of fever, such as headache, pallor of the skin, languor and drowsiness, rheumatoid stiffness, and pain in the bones, emaciation and so forth. These symptoms may extend over a period of several weeks. But sometimes the fever is very acute in its severity and course, and I have known cases with a temperature of 103.5^o where the pain was so severe as to require the administration of morphia for its relief. You will sometimes also get the distinct neuralgic affections in these cases, and the fifth cranial nerve is the one most apt to be affected. I have seen a neuralgia of the fifth nerve as acute as you will ever find under any circumstances. All the usual phenomena of this stage are presented by this patient.

I have already spoken once or twice of the analogy which is noticeable in the evolution of constitutional syphilis, to the evolution of certain fevers. And this analogy is so striking that it is worth bearing in mind. The evolution and duration of the different stages of syphilis, however, extend over a greater period of time. As in fevers, so here we have a period of incubation; and then a period of local manifestations, followed by a period of generalized eruption and constitutional symptoms, which lasts for an indefinite period; and lastly, a period of sequelæ, which is the period of tertiary eruptions and gummy growths. The analogy also holds in some other respects. For all persons are not susceptible to the syphilitic poison, which is also true of the contagious fevers. Many individuals are exposed to infection over and over again, but never take the disease, while others succumb upon the first exposure, and then they run through all the periods of the disease in a few months.

Now what is the prognosis in this man's case? Is it necessary that he should pass on into the tertiary period of the disease, sooner or later? This I can not say. He may pass into it, and he may not. The chances are that he will, but this is not certain. Many men go through the entire eruptive period, and then never suffer any more from the disease. But there are many more who do suffer afterwards. Nor can we say how soon the tertiary symptoms will appear after the disap-

pearance of the secondary. It may be in the course of twelve months, or in twelve years, or it may be never. It has been stated by some that a profuse generalized eruption is a more favorable sign than a sparse, or more papular one. But I do not think the truth of this fact has been well enough established as yet, to influence our prognosis.

Now comes the question, how shall we treat this man. In the treatment of constitutional syphilis mercury in some form is now commonly used. Both the mild chloride and the mild iodide have been much employed, as well as metallic mercury itself. Almost every practitioner has his favorite preparation, and mode of administering it. The protoiodide is ordinarily a very excellent preparation. If it produces digestive disturbances, diarrhœa, or colic, this trouble may be corrected by administering with a little opium. And, indeed, this combination is very common. The mercury is administered in the alterative form, in small repeated doses, with the idea of producing its specific effect on the gums. But it should not be carried so far as to ptyalize the patient profitlessly. However, you will often find great difficulty in ptyalizing a syphilitic patient. For syphilis seems to have a remarkable power of rendering the individual insusceptible to mercury, and so, much larger amounts are required to produce ptyalism than would be necessary ordinarily. The same is true as to the production of the specific effects of iodide of potassium, in tertiary syphilis.

There is another fact, gentlemen, which I wish to impress upon you, as it has so often been impressed upon me in connection with the toleration of drugs in disease. I refer to the fact of the intolerance of alcohol, which syphilis provokes in those who have it. I believe that it is now a well-established fact that a syphilitic patient can not use alcohol in any form without doing himself damage. And you cannot treat constitutional syphilis successfully if you allow the patient to use wine, beer, or spirits at all while he is under treatment. I cannot explain the irritating effect of alcohol on syphilitic patients, any more than I can explain why they can take mercury and iodide of potassium in almost unlimited quantities. The fact in regard to alcohol is however no more strange than that in regard to mercury and iodide of potassium.

This patient has been treated with the oleate of mercury by inunction. There are numerous methods employed for administering mercury. Such as by vapor, by inunction, by the stomach and by hypodermic injection. All these methods are used by different practitioners, and your choice will usually be made according to your own particular success with some one of them, or your affiliation with the views of some specialist. I have no particular form of administering to advocate. But if the patient can not take it by the mouth, you may give it by inunction. But this is not very practicable in private practice; for you must give special directions as to the place where it is to be rubbed in, and the amount, and the protection of the clothing from staining by the ointment, and so on. The oleate of mercury is a much neater application than the old mercurial ointment. The hypodermic injection is a very good way of producing ptyalism speedily.

Sometimes it may be necessary to give tonics in connection with the specific drugs. But as a rule mercury itself acts as a tonic, and improves the general system remarkably, and so precludes the necessity for iron or quinine or bitters. You will often see an emaciated and chlorosed syphilitic patient, improve at once upon the administration of mercury. You will find nothing more remarkable in the alterative action of drugs, than what is experienced in the treatment of syphilis by small doses of mercury. This is even more effective in improving the general quality of the blood than is iron under similar circumstances.

This patient will be under treatment and observation for a long time yet, and so you will be able to see from week to week the general improvement as it progresses.

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

(Continued from page 302.)

Another curious thing, to be observed in the literature of hydrophobia, is the way in which the madness of the dog is often—one might say usually—deduced from the diagnosis of hydrophobia in the man; instead of the diagnosis of hydrophobia being made to rest upon reliable evidence that the dog was really mad, it is uncommon to find any proof whatever that a dog to which hydrophobia is attributed was rabid, this being, with rare exceptions, a pure assumption. The one phenomenon of a dread of water usually determines the conviction of the physician that he has a case of hydrophobia before him, and settles his opinion of any dog that may ever have bitten the patient, and cannot now be accounted for. Nay more, this mode of reasoning has led certain writers to the assertion that there may be a passing state in dogs in which they may communicate to a human being hydrophobia, but themselves recover. Thus is the struggle to support the specific theory kept up when circumstances seem to be most adverse to it.

Once more, and I am done for this occasion with objections to the anomalies which one meets in examining the basis upon which the general belief in regard to hydrophobia rests. I find in the recorded cases—with very rare exceptions—that, when once hydrophobia is suspected, every phenomenon that occurs during life, every lesion that is found post-mortem, is unhesitatingly set down as a feature of this disorder; and the idea does not seem to be entertained that many of them are grounds of suspicion that some other disorder is present. In this way all lines of distinction between hydrophobia and disorders which simulate it are erased; and it remains for every medical man who is called to a patient who has a dread of water, accompanied with exaltation of reflex excitability, to inquire for a bite or scratch of a dog or cat; if one cannot be drawn out, to assume that it has been received and forgotten; then to make a diagnosis of hydrophobia; after which it is only necessary for the patient to die, to make a complete record. If to this be added a careful

microscopical examination of the state of the brain and spinal cord, the observer will have an exact counterpart of the process by which the famous conclusions of certain investigators—often quoted by those who have not taken the pains to go to the evidence upon which they are founded—were arrived at.

This suggests a brief consideration of the pathological lesions of hydrophobia. Notwithstanding all the diligent endeavors made to learn something from the post-mortem examination of the bodies of dogs and men that have died of rabies or hydrophobia, one might to-day adopt the language of Dr. Hart, who declares (*Cooper's Surgical Dictionary*, art. "Hydrophobia") that these examinations afford "little else than a varied mass of symptoms, common to other nervous and blood disorders," and fail to "throw any clear light on the pathology of the disease."

I will not trouble you with the disappointed anticipations of the ancients in this connection: those of modern times are more instructive. The announcement by Hallier, in 1872, of the discovery of a micrococcus which was the germ of hydrophobia, and to which he gave the positive name of "lyssophyton," and the belief of Klebs in the parasitic nature of the granular elements found around the blood-vessels near the scar, have appeared and disappeared within the last decade. The hasty statement of Pasteur that he had obtained from the saliva of a patient dying of rabies a peculiar germ which, when he had cultivated it and inoculated the product, gave rise to a hitherto unknown disease, he was compelled to withdraw almost as soon as he had made it.*

The investigations of Benedikt, Coats, and Gowers, are of the greatest interest in connection with this part of our subject. They are often spoken of as if their results were identical and conclusive; although, in fact, they are neither. Dr. Benedikt published his investigations in 1875, in *Virchow's Archiv*. The text is accompanied with a plate which leaves little room for misunderstanding the author's meaning. The lesions described and figured consist of a perivascular exudation or extravasation (or both) of red blood-corpuscles, miliary spots of finely granular degeneration of the brain substance, "miliary abscesses," and melting down of effusions so as to make hyaline bodies alongside of the blood-vessels, often closing their lumen; while the vessels had a pigmented encasement (Pigmenthülle), made up of red blood-corpuscles. These lesions were found in both dogs and men. Dr. Coats published his discoveries in the *Medico-Chirurgical Transactions*, in 1878, accompanied also with plates. His investigations referred to tetanus and hydrophobia. He makes a point of the analogies between these two disorders; and, assuming a virus in hydrophobia, he argues backwards that there is a poison circulating in the blood in tetanus. The lesions he describes in hydrophobia

*Nothing daunted by the experience of others, I observe that Dr. Paul Gubler reported to the Acad. des Sciences, of Paris, on the 11th of June, 1883, that he had found a special organism in the rachidian fluid of animals that had died of rabies, and that the virus could be attenuated by means of cold. Another of the conclusions he announced at that time was that the disease is communicable from mother to fœtus.

consist of a perivascular infiltration with white blood-corpuscles.

In comparing these investigations, it is to be noted that the lesions Coats found in tetanus correspond much more closely with those Benedikt found in hydrophobia than do those the former found in his investigations of this latter disorder. Further, it is to be noted that he describes the perivascular infiltrate as consisting of *white* corpuscles, while Benedikt is clear in describing it as made up of *red* corpuscles. Finally, Coats does not consider (though most persons who refer to him speak as if he did) the lesions he found to be distinctive of hydrophobia, but simply evidence of irritation in the blood. Thus we see that these two investigators cannot be regarded as confirming each other.

Now the association of the name of Dr. Gowers (whose investigations are described and illustrated in the *Transactions of the Pathological Society of London*, vol. xxviii., 1877,) with those of Benedikt and Coats, as having found lesions pathognomonic of hydrophobia, is equally unwarranted, for he distinctly stated in answer to a question, at the meeting where he demonstrated his specimens (*Lancet*, June 9, 1877, p. 840), that his investigation did not lead him to believe there was any special lesion in hydrophobia.

But, inconclusive and conflicting as the results of all these careful investigations have been, it might be easy to see how they might be taken for more than they are worth, if it were not for the fact that they have been formally and categorically vitiated by the subsequent investigations of others. Thus Middleton (*Journal of Anatomy and Physiology*, 1881,) has published the results of microscopic examinations in which he found perivascular aggregations of round-cells in two cases of hydrophobia, corroborating some of the appearances described by Benedikt, but disagreeing with Coats and Kolesnikoff in essential points. But the most striking point of his publication lies in the fact that he found the same morbid appearances which were present in the cases of hydrophobia, in cases of purpura hemorrhagica, diabetes, fracture of the skull, erysipelas, head injury with hæmatoma, concussion of the brain with fracture of the spine, delirium tremens, peritonitis, tubercular meningitis, mental deficiency and excitement, hæmatoma, tetanus, and uræmia. His paper concludes with the distinct avowal that, "As regards the pathology of hydrophobia, it still remains true that nothing characteristic has been observed."

Another investigator, who has gone over this ground, and come to conclusions as destructive as those of Middleton, is Ivanoff, who says (*London Medical Record*, March 15, 1883, from *Vratch*, 1882, No. 15,) that similar appearances to those observed by Benedikt, Gowers, and others, are found in typhoid fever. One of the supposed characteristics, the transparent spaces, he says, were found by Popoff and Stephanoff in uræmia, and by Vinogradoff in intermittent fever, by Danillo in phosphorous poisoning, and by himself and Dr. Czorkov in the brains of healthy dogs. They have no pathological character whatever.

But I need not detain you with further references to more or less famous investigations. I will only add that they all tend to confirm the

opinion that as yet no gross or microscopical lesion has been discovered which can be regarded as pathognomonic of rabies or hydrophobia.

And now I must close. I have not said so much because it is any pleasanter or is likely to be any easier for me than for others to differ from the majority in the branch of science to which my life is given. It is with shrinking that I take a position which, if it is deemed worthy of notice, will be apt to excite opposition, perhaps condemnation. But I have now been engaged for nearly two years in a laborious study of the evidences upon which the general belief in regard to hydrophobia rests, and I have been gradually led to certain convictions different from those with which I started, and which I feel it my duty to make public. One of these is that hydrophobia is not a specific, inoculable disease, derived from the bite of a similarly affected animal. Another is that if we wish to have an accurate, scientific knowledge of what too often actually takes place, and is usually called hydrophobia, we must begin the study of it unprejudiced by the views heretofore generally entertained in regard to it, and with canons of criticism very different from those heretofore deemed sufficient.

I know that these convictions are not novel, and that they have been stated and defended with arguments before. I know, too, that they have heretofore failed to secure the assent of the greatest men who in every generation have adorned the profession of medicine. None the less, however, do I believe them to be true, and that the time will come when they will not be—as they have been in the past—characterized as too absurd to be discussed, or decried as too dangerous to be tolerated.

But, however that may be, a sense of duty compels me to join myself to the small minority whom I think to be on the right side of the question, for truth's sake. Further, in this matter, the interests of science are in an urgent sense the interests of humanity. For this reason one who feels strongly must speak boldly. This, then, is my apology to those who may think I have erred in opposing the opinion of so many men deservedly honored and respected in our profession.

[After the reading of the preceding paper:—]

Dr. Henry Hartshorne observed, that the author of the paper has given an interesting philosophical analysis of the confusion and uncertainty attaching to much of the evidence concerning hydrophobia.

But when the question occurs as to accepting the conclusion to which he has come, that no specific disease, resulting in man from the bite of the rabid dog, has been proved to exist, Dr. H. H. must necessarily dissent from this, for the best possible reason; namely, direct personal observation.

It had happened to him, early in his practice, to meet with a case, the history of which was known to him from the beginning. The essential facts were these: A boy, eight years of age, was bitten almost in front of the speaker's house, by a dog which, upon usual evidence, was considered to be mad. A day or two afterwards his father brought him to Dr. H. H., and, late as it was, excision of the bitten part was advised; this was, however, not consented to.

About a month afterwards, Dr. H. H. was called to see him. Not proposing to detain the College with all the particulars of the case, which was fully reported in the *American Journal of the Medical Sciences*, it may be said that it was studied without any prepossession or expectation as to what its course would be. Dr. H. H. had not, before that time, become very familiar with the clinical history of the disease. The most striking symptom, which may be considered, in the speaker's present judgment, to be pathognomonic of hydrophobia in man, was an *excessive reflex excitability of the muscles of respiration*. This persisted throughout the case. Not only an effort to drink a fluid, but the sound of running water, any sudden sound, a flash of light, even the puff of air made by moving the hand lightly above the patient's face—every such slight cause would induce a *gasps* of respiration, which gave rise to incessant distress, and made swallowing food or drink impossible. The boy was violently delirious; and this, as well as his age, and the peculiar character of his affection, put quite out of sight any suggestion that a *mental* cause, from horrible anticipation of hydrophobia (such as, no doubt, in several other cases has existed) could influence the case. He died in about a week from the beginning of the attack.

Dr. H. H. also afterwards saw another case; that of a man, under the care of the late Dr. Geo. W. Norris, in one of the surgical wards of the Pennsylvania Hospital. This patient was not delirious. In him also, the reflex inspiratory spasm was clearly marked; although, for a time, he could swallow moistened pellets of bread, or other solids, but no liquids. Along with this, it must be noticed, there was *in neither case* any *etanic muscular rigidity*. The absence of this at once differentiates such cases from tetanus; with which some authors, who have not *seen* instances of hydrophobia, have been inclined to conjecture their identity.

By such observations, confirmed by the records of many others in the literature of hydrophobia (which is not *all* confusion), Dr. H. H. has been obliged to conclude that there is a disease *sui generis*, to which that name, though not well chosen, may apply. Attacks do occur in men, after they have been bitten by dogs, which are unlike every other disease; therefore we infer the existence of a *specific* malady. It is, so far (with two or three *doubtful* exceptions only) invariably fatal. It may take place anywhere; even (as Dr. Dulles incidentally said) in Constantinople and Africa, notwithstanding the denial of this by some writers.

Against the horror and certain fatality of such a disease, granting its existence, the precautions now commonly taken are not at all excessive. It would be very unsafe for them to be relaxed, unless a clear case was made out of the actual non-existence of hydrophobia. It would be much to be regretted, therefore, that a conclusion, such as that of the paper just read, should go before the public, in the proceedings of the College, without protest; if, at all events, objection to it rested in other minds as well as in that of the speaker.

Dr. H. Hartshorne, after some further discussion, inquired of Dr. Dulles whether he rejected the opinion that *rabies canina* is inoculable from dog to dog?

Dr. R. P. Harris said: I have met with several cases of hydrophobia, and have been present when the disease was investigated by autopsy. I well remember the case of the boy just reported by Dr. Hartshorne. The youth and sex of the patient, the peculiar symptoms of his malady, and the history of his exposure to canine rabies, gave positive proof of the existence of hydrophobia. My father not having met with a typical case, in an extensive country practice of twenty years, was inclined to doubt the existence of true rabies, until I took him to see this case. Dr. Hartshorne was present, and we examined the patient critically, and with much interest. This was the first case my father had had an opportunity to see, although he had then been in active practice more than thirty years, and it had the effect of convincing him that he had been in error in regard to it. The existence of this disease in young subjects, of which there are many cases on record, clearly proves to my mind that it is a veritable blood-poisoning, and entirely distinct from hysteria and other neuroses. I have known a hysterical woman, under the fear of rabies, from having been bitten by a dog, manifest symptoms somewhat allied to those of hydrophobia; but a critical examination revealed the true nature of the disease. Such a case existed some years ago in Camden, and was very much talked about in Philadelphia; but the recovery of the lady satisfied the community of the true nature of the attack.

Dr. S. W. Gross asked Dr. Dulles if he desired to be understood as stating that hydrophobia was not a specific disease, but a pure psychosis.

Dr. S. D. Gross inquired whether Dr. Dulles was willing to be bitten by a dog suffering from hydrophobia as a test of his belief in the non-existence of the specific disease in man.

Dr. Dulles declined at present to give an answer to the inquiry of Dr. Henry Hartshorne; because to do so would involve a discussion almost as long as that of the paper he had read. He preferred at this time to confine himself to the subject of hydrophobia as reported to occur in man.

In reply to the question of Dr. S. W. Gross, Dr. Dulles said that if the specific element in hydrophobia be eliminated—as he believed it ought to be—there remained nothing except to consider the cases as pure psychoses, or as errors of diagnosis. It is, he said, remarkable how little physicians seem to be aware of the number of conditions in which, as is well known to students of the subject, the symptoms of hydrophobia are simulated. In reply to Dr. S. D. Gross, he said that the question the latter had asked proposed not so much a test of the truth of his convictions as of his personal courage, and this was not the subject under discussion. But he could say that there had been a disbeliever in the specific theory of hydrophobia who had been willing to show his faith by his works. In the beginning of this century, Dr. White, a young surgeon, of Brighton, England, had allowed himself to be bitten by a mad dog, and had inoculated himself with this dog's saliva, without suffering any evil effects in consequence.

THE ANNUAL REPORT OF THE LIBRARY COMMITTEE showed that there have been added to the library this year—

2186 volumes,
2107 pamphlets,
2862 numbers of journals.

The total number of volumes now in the library is 26,359. For the ensuing year, the Library will be kept open, except on Sundays and legal holidays, from ten o'clock a. m. to five p. m.

There are in the collection 3381 duplicates, and particular attention was called to this fact, inasmuch as it affords a rare opportunity to other libraries, of augmenting their list at comparatively small expense.

THE REPORT OF THE COMMITTEE ON THE DIRECTORY FOR NURSES

showed that the number of nurses registered December 1, 1882	209
Added during the year	104
Lost by striking from roll	6
Lost by withdrawal	4 10
Net gain	94
Present number	303

Total number of nurses furnished during the year, 733—an average per month of 61, as against 49 for last year.

Largest number (February)	84
Smallest number (August)	34

Sent outside of the city, but within the State, 63	
Sent to other States	59
Wet nurses furnished	17
Of registered nurses, there are males	39
“ “ “ females	264
Graduates of training schools	60
Non-graduates	243

The amount given to the library during the last year was \$200, and for the present year, \$300. Many physicians take great trouble and waste much valuable time in hunting up nurses personally; or, having obtained a good nurse through the Directory, they transfer her from one patient to another directly, instead of through the Directory. Were they to use the Directory they would obtain the same nurses, and add to the income of the Directory, and so to the appropriation to the Library.

It is the desire of the committee to make the Directory also a bureau for all needed information for the sick; and they have in contemplation measures by which, if any one desires to obtain boarding in the country, or at the seaside, for cases of whooping-cough, or for recent cases of measles, scarlet fever, or diphtheria; and for information concerning all appliances for the sick, such as invalid-chairs, wheel and other crutches, bed-rests, fracture-, water-, or air-beds, etc., he may obtain the object he seeks at the Directory.

EDITORIAL DEPARTMENT.

PERISCOPE.

Tobacco Poisoning.

The following valuable extract from a lecture on this subject by Mr. Jonathan Hutchinson, we take from the *Med. Times and Gaz.*, January 12, 1884:

In this connection let me relate to you a case which is instructive, although not so well authenticated as to detail as I could wish. I had the narrative from a medical man of great intelligence, who was himself the subject of it. He told me that some years before I saw him, he had for some months been “nearly blind.” He lost reading power, and “could scarcely recognize his friends.” He consulted, separately, four distinguished ophthalmic surgeons. One said that he could find nothing amiss, but gave a gloomy prognosis. Another thought the optic discs pale, and another, that all that he could see were unusually large physiological cups. Two conjured him not to smoke; a third said he might smoke as much as he liked; and another omitted any opinion on this point. He had been smoking very heavily, and drinking very moderately. The failure had begun whilst on a visit to Germany, when he had smoked still more than usual, but a mild tobacco. In spite of the advice given he did not, as he says, in any way diminish his smoking. He took strychnia until his muscles jumped, but was no better. On one occasion, whilst at his worst, he dined with a friend and took “quite as much champagne as a respectable person ought to do.” This was against

his usual habit, which was to be abstemious in wine. The result was that when he reached his home after the dinner, he found, to his delight, that he could read small print. In the morning, however, his sight was as bad as ever. At length he consulted a fifth specialist, who ordered him small doses of opium. Finding some, but not all the benefit he desired, he took not small doses but large ones, and had the good fortune to have his vision steadily improve, until he could see again almost perfectly. He had some difficulty in leaving off his opium, but gradually diminishing the dose, he at length did so. Now Dr. — assured me that he knew of no cause for this attack of amaurosis, nor of any explanation of its cure excepting that assigned. He had been in good health all the time, and neither before nor since had he suffered from any indications of nervous exhaustion. He was not overworked, nor subjected to any mental distress. You will see that I have no accurate information as to the degree to which the amblyopia had proceeded, nor excepting from what he remembered as to the exact state of his discs. Still, the case fits very closely indeed with the facts with which we have been familiar in a hundred instances of so-called tobacco amaurosis. I have seen many a patient affected in just the same way improve immediately and permanently on leaving off smoking. But here we are assured there has been no diminution whatever at any time. Let me say here that my patient was a man clearly fond of pictorial effect, and he may have unconsciously exaggerated. It

may have been that he did reduce his quantity or quality, it may have been that he indulged to very great excess before the outbreak, or that there was something in the German tobacco which he got which specially poisoned him. I incline, however, rather to the belief that we have here an instance of one drug efficiently counteracting the ill-influence of the other. The opium perhaps relaxed the set of blood-vessels which the tobacco had thrown into spasm. This suggestion is in keeping with what was noted after the champagne dinner.

I have known many cases in which the subjects of smoker's amblyopia recovered perfectly, although they never left off smoking; and of those who had given it up for a time, I do not know that I ever once witnessed a relapse when the habit was, as it always is, resumed. It may be thought that such facts go against the belief that tobacco has anything to do with it, and that this is made almost a certainty by such a case as that which I have just related. For myself, I do not think so. Show me parallel cases occurring in those who do not smoke. It is possible that even one or two of such might be produced, but they are infinitely rare; whilst in heavy smokers, this form of transitory amaurosis is an everyday occurrence. If cases were forthcoming in which there had been no smoking, my reasoning would be this—there is probably a form of nerve disorder, perhaps a passing neuritis, perhaps only a vascular ischæmia, which may be induced by exciting causes of the precise nature of which we know nothing, but concerning which it is still in the highest degree probable that something acts as the predisposing cause. No doubt there is idiosyncrasy in the furthest background; as a middle stage, the long-continued habit of smoking; and lastly, some unrecognized influence—some depression of nervous tissue perhaps—which determines the attack. The final exciting cause may in some cases be important, and in many it may perhaps be absent, the tobacco being itself sufficient.

You will see that these conjectures open to us a very interesting chapter in reference to the influence of drugs in general, especially of those drugs which we give over long periods of time, and of those which become, with many persons, articles of ordinary use quite independent of medical prescription. We do not know but what other articles of which the chief influence is upon the nervous system may after long continuance produce injurious results. We can by no means safely assume that because a nervine stimulant is borne with impunity, or even with apparent advantage, that therefore it is wholly innocuous. It may be that its use involves the risk of very peculiar and wholly unexpected disorders. In the light of this conjecture we ought to examine as to all that is possible in reference to the different kinds of wine, tea, coffee, hops, quinine, absinthe, chamomile, and many others. I shall ask you presently to observe the facts as to the connection between arsenic and attacks of herpes zoster, facts which are, let me say, somewhat similar to those in reference to tobacco and attacks of amblyopia. Before proceeding to this subject, I wish to take an illustration from an article which comes into the diet category. The study of drugs is often

sufficiently difficult, but that of diet is surrounded by peculiar fallacies. Especially we must remember that both in prescribing and in feeding, combination is often everything. A thing which might have agreed well alone, may poison when taken with something else; or conversely, that which alone would certainly have disagreed, may go all right with its proper adjunct. If you put tannin with your tobacco, a man wholly unaccustomed to smoking may take a pipe with impunity. So, also, camphor counteracts the effect of tobacco, and belladonna prevents the headache from opium. Not only must we keep in mind, in all questions of diet, the possible influence of some unremembered combination; but we must bear in mind, that the state of the individual varies at different times. Most of our patients are marvellously unobservant in these matters, or, rather, observe in a hurry, miss out facts, and arrive often very confidently at most erroneous impressions. Sometimes, however, we chance upon an acute and careful witness as to his own health and the things which help or hurt him. When such is found, prize him and listen in patience to his narrative. I have told you in a former lecture how in respect to "egg poisoning" it is often unsuspected by the patient, and how, also, in some cases it is only in certain conditions of health and under certain circumstances that eggs do disagree. Now, just the same is true of tea and coffee; they will agree under certain conditions, and not under others. The man to whom tea has appeared for years to be an essential of comfortable existence, may suddenly find himself compelled to abstain from it. It may be that slowly this beverage has itself induced a change in the state of the nervous system; but it may also be that some other change in diet has taken place, or, perhaps, that it is the mere result of advance in age.

A Case of Retention of a Mummified Three Months' Fetus until the Seventh Month after Conception.

Dr. I. Henry Fruitnight reports this case in the *Am. Jour. Obstetrics*, January, 1884:

In the latter part of April, 1883, Mrs. S. menstruated for the last time. Soon afterwards she developed the usual sympathetic and reflex symptoms of pregnancy, such as "morning sickness," shooting pains in the breast, languor, etc., and at the same time noticed that her abdomen, as well as her breasts, were increasing in size. As she had already borne three children, she naturally concluded that she had become pregnant for the fourth time. I had attended her during the last two confinements, both of which had been normal in every particular. In the middle of August she was very much frightened by the occurrence of a convulsion in her youngest child. A few days subsequently, on August 17, she observed a discharge of blood from the vagina, but unaccompanied by pain. The bleeding, which was not profuse, continued for a few days, and recurred later in the month. On September 5 it again appeared, and she presented herself before me for examination. On physical examination, I found a little oozing from a very slightly patulous os. The uterus was enlarged, but it seemed to me not quite so large as it should have been at the supposed period of pregnancy, now about four and

one-half months. My diagnosis was a partial separation of the placenta from the uterine wall, and hemorrhage as a result, both into the placenta and externally. I advised quiet and rest, and prescribed grt. x. ol. erigeron canad. on sugar every two hours, until hemorrhage ceased. I did not see the patient again until November 3, when she continued the history as follows: She said "that she almost doubted that she was in the family way, because she was now near her seventh month, and had never felt life, though she thought that at one time she had been aware of the movements of the fœtus. Moreover, after the last discharge of blood, she said that she had grown smaller around the abdomen, and that her breasts also had become smaller; and she also stated that at about the time of the first bleeding, the reflex symptoms of pregnancy, as vomiting, etc., had disappeared."

I appointed a day for a physical examination, but on the following day, November 4, I was hastily summoned to my patient's home. She was suffering from uterine contractions, and was bleeding from the uterus. I made a digital examination, and discovered a globular body, about the size of a hen's egg, protruding from the os uteri, and by my manipulation it was ruptured, and a fluid escaped. Nothing further could be detected, but when I withdrew my finger, I observed a piece of membrane adhering thereto. She was placed upon ergot, fluid ext. Squibb, ʒj. every two hours.

I again examined her on the following day, and detected what I surmised to be the leg of a fetus of about the third month of development. But as it could not be budged, I decided not to interfere, but continue the ergot as before. On the evening of the same day I again visited my patient, and was then enabled to deliver her of a fetus. My surmise had been correct; it was a foot presentation of a fetus of the development of about three and one-half months. Its form, however, was flattened from compression. It was very friable. The viscera of both the thoracic and abdominal cavities were exposed to view, and very small and shrivelled. Its color was of a dark brown, and it was leathery and wrinkled, and hence called a mummified fetus. And as Prof. Lusk says, on p. 288 of his admirable treatise: "The subcutaneous areolar tissue had disappeared, and the skin lay in direct contact with the muscles." No trace of putrefaction was discoverable. The umbilical cord seemed normal, though somewhat long. After the fetus had been removed, I attempted to reach the placenta, but I was unable to do so. I continued the ergot as before during the night, hoping that it might be expelled naturally, as it eventually was at some hour in the night.

The placenta was quite small, measuring $3\frac{1}{2}$ inches longitudinally, and $2\frac{3}{4}$ inches transversely, and having an average thickness of $\frac{7}{8}$ of an inch. It weighed about $2\frac{3}{4}$ ounces. Its tissue was very hard, dry, tough, and yellowish. It showed traces of fatty and fibroid degenerations.

On one edge of the circumference of the placenta were the remains of a large decolorized clot, evidence of an earlier hemorrhage, possibly of the one in August. There were also to be seen recently formed clots.

It seems to me that this is a quite uncommon and interesting case. Most probably the first hemorrhage caused the death of the fœtus, and induced the changes in the placenta. The integrity of the membranes preventing the access of air, explains the immunity from putrefaction. This arrest of development and mummification of the fœtus, and its subsequent retention in utero for many weeks and months, and at times even beyond full term, happens more frequently in twin or multiple pregnancy. In these last cases, quite often one of the fœtuses becomes a victim to this perversion of nutrition; one fetus maturing normally, the other mummifying. But in a single pregnancy, as the case just related, it occurs very infrequently. From the whole clinical history of the case, the fœtus must have been blighted at about the third month, and remained innocuous in utero for four months, before nature took it upon herself to expel the intruder from the uterus. Neither parent exhibits any syphilitic taint, nor have they ever suffered from specific constitutional infection.

The Unity of Poison in Diseases.

Dr. G. De Gorrequer Griffith read the following paper before the British Medical Association at its last meeting:

In the year 1875, I first called attention to the fact that what is termed scarlatina occurring in the puerperal is frequently not scarlatina at all. But, before I proceed further, I must explain what I mean. I hold that there are two forms of scarlatina; the orthodox—viz., that contracted from a previously affected person, or something infected thereby—and the septicæmic, or toxæmic—viz., that which is evolved or generated *de novo*, as a result of autogenetic blood-poisoning, such as occurs in puerperal cases, or is evolved as a consequence of hetero-genetic blood-poisoning, such as arises (where no scarlatina had existed before) from drains, sewers, imbibition or ingestion of deleterious articles of drink—water, milk, cream, etc.—or of food; and from decomposing animal or vegetable substances. This toxæmic or septicæmic scarlatina, which is evolved from the above causes, is identical with the "surgical scarlatina" of Paget; and will, on strict investigation, be found to be the form of scarlatina which more usually prevails among puerperals. In saying, "It is not scarlatina at all," I mean it is not the orthodox—namely, that which is recognized by all the profession, and is, as all agree, contracted from a previously-infected person or thing.

While carrying on this investigation, I was struck with the unity of origin in cases of puerperal fever, and typhoid also; and, in pursuing the inquiry, found how, from the same source, there would spring erysipelas, scarlatina, typhoid, puerperal, and diphtheria fevers; sore umbilicus in infants, sore eyes, sore mouth, and sore throats, embracing a very wide area of inflammation and inflammatory conditions of palate, tonsils, pharynx; and, passing still further on in the respiratory tract, the larynx, the bronchi, the pleuræ, or the pleuræ and lung, would be found involved; so that toxæmic or septicæmic laryngitis, bronchitis, pleurisy, pneumonia, and pleuro-

pneumonia, attacking a variety of persons, may all, as in the case of the other forenamed ailments, viz., toxæmic, typhoid, etc.—as I call them, to distinguish them from the orthodox—be traced to the same causes; as could also hepatitis, diarrhœa, dysentery, cholera, enteritis, hemorrhoids, and a large number of affections hitherto considered to be utterly distinct, and having no connection with each other, no point in common, no place where all meet together, because they diverge so much afterwards. Hence, I formulated, as a heading to my papers, unity (as regards origin) of poison in the diseases I have just enumerated, and in many others, usually considered to be separate and entirely distinct.

This unity and differentiation in the course of evolution is now recognized by many medical men. Moreover, I found one disease (I adhere to the current word), or, as I term it, one set of symptoms, to be evolved from another, in some cases so far apart in nosological arrangement as to be said to be wholly and entirely distinct, distinct even to specificity; and a number of nosologically divided diseases (sets of symptoms) to be evolved from the one unity-point, the one common ancestry—differentiated no matter how widely, as they actually become, afterwards. I have, therefore, extended the formulated heading into "Unity of poison in diseases usually considered to be separate and entirely distinct; and the evolution of one from another apparently quite distinct, and of many diseases—seemingly all different—from one unity or common origin;" evolution from this unity leading to differentiations. Further, I recognize that symptoms occurring in the course of an affection, say such as scarlatina, symptoms which ordinarily are termed "complications," may become primary motors of disease, originating a fresh epidemic, it may be—fresh, inasmuch as it would differ from that in the course of which it was itself evolved. For example: Diphtheria not unfrequently is met with as a "complication" of scarlatina (I would say it was part and parcel of the scarlatina), which, in this instance, would be spoken of as the primary disease, the other as being secondary; this latter would be conveyed to a number of persons, even to such a number, it may be, as to constitute an epidemic, spreading fast from one to another. Then this diphtheria would cease to propagate itself, or would cause something quite different to be evolved, or would cause diphtheria to be evolved in the persons exposed, or in the course of these evolutions it would hark back to that which set it agoing—viz., scarlatina; or there would originate or evolve, in a number of the exposed, certain other symptoms, usually considered sequelæ, but not actually part of the scarlatina; so that another outburst of something, seemingly altogether different from scarlatina and diphtheria, would take place, to cause perhaps another new evolution; or, again, to hark back to scarlatina or diphtheria, or both combined, as it would be termed; or would, as it were, leap forward and cause to be evolved, in a certain number of cases, a very ulterior sequela of scarlatina—say rheumatism, or rheumatic fever, and heart and pericardic affections; or the latter *per se*; or, it may be, nephritis (the scarlatinal form) would be evolved, without any other intermediate symptoms being noticed, or any pre-exist-

ing warnings having been detected, or indeed been noticeable or detectable, such a form of nephritis as would be infectious—infective nephritis, I would call it—inasmuch as it has the power to set up scarlatina, or diphtheria, or any other ailment or group of symptoms coming within the range of its infectivity. In this way, new sets of symptoms may be evolved, new outward manifestations of the inward workings or evolution, a new disease in fact, as would be said in current medical phraseology. In this I am fortified by the Bradshawe Lecture of Sir James Paget, and his and Sir William Gull's addresses on "Collective Investigation of Disease."

By unity of poison, I would beg my hearers to bear in mind I mean, not that the poison is always the same, but that the one poison—the one *origo mali*—whatever it may be, will originate several so-called different affections—widely different seemingly, widely different they would be spoken of, widely different even to be considered in every respect "specific."

The Gouty Kidney.

In the *Lancet*, January 12, 1884, we read that an interesting address was given to the Berlin Medical Society, at a recent meeting, by Professor Virchow (*Berl. Klin. Wochenschr.*, No. 1, 1884), upon the relations of gout and renal disease. He first of all dispelled the erroneous idea that gravel and calculus have anything to do with gout. He then showed that gouty—i. e., uratic—deposits often occur without the patient ever having been the subject of a definite acute paroxysmal attack of the disease; and he pointed out the distinctions between the chronic latent form and arthritis deformans, having only once met with the uratic deposit combined with the peculiar joint condition of the latter affection. The gouty condition depends on imperfect nitrogenous metabolism, and may either be due to the excessive ingestion of nitrogenous food, or to a special disposition to defective elimination of nitrogenous waste. The "gouty kidney" is characterized by a deposit of urate of soda within the tubules of the medullary portion; but the degree of the renal affection bears no constant relation to the amount of tophaceous deposit about the joints. Indeed, there may be no gouty arthritis present at all, and yet the kidneys be affected. It may be that there is an essential difference in these two classes of cases, but as yet no other condition than that known as the "gouty," and marked by an excess of urate of soda in the blood, is known to produce either the articular or the renal deposit. The kidney is also the seat of chronic interstitial nephritis—puckered and wasted—the wasting involving medulla as well as cortex. Virchow has never seen an *acute* nephritis which from the presence of the uratic deposit could be referred to gout. He points out that the chronic inflammatory change starts in the cortex, at a distance, that is, from the seat of the urates in the medullary tubes; just as in the joint, the urates occur in the cartilages and ligaments, whilst the synovial membrane is the seat of inflammation. From this he argues that it is not the presence of the crystals, but the exudation of the fluid containing the uric acid in solution, that

acts as the irritant; the surfaces in contact with the secretion that are inflamed, and not so much those in which the salt is finally deposited. And here he adduces as evidence an illness from which he suffered towards the close of 1882. He had never had any attack of acute gout, but from time to time he suffered from slightly reddened and painful swelling of the fingers, interfering with movement. In the course of 1882, he began to suffer from an irritable bladder, with occasional febrile attacks, which passed into considerable irritation of the urinary organs, with pyuria, ischuria, etc.; and he was made very uneasy by being told one day that in addition to the pus, albumen and renal tube-casts had been detected. The renal pelvis, bladder, and prostate—in fact, the whole urinary tract—seemed to be in turn affected by some irritant. One day he bethought him to examine the pus, which was passed in large amount, to determine its source, and to ascertain whether it came from a mucous surface only. On adding acetic acid to the deposit to ascertain the presence of mucus, he was surprised to see the whole microscopic field covered with uric acid crystals to an amount which he had never seen before. Yet there was no suspicion of gravel or calculus, and he rightly inferred that this excess of uric acid indicated energetic alkaline treatment. This he at once commenced, taking borate of soda and Carlsbad water, with almost immediate disappearance of the uric acid crystals from the urine. He continued the treatment for three months, and has never passed any pus, albumen, or casts since. He could give no other explanation than that the blood and urine being highly charged with urates in solution, had acted as irritants to the whole urinary tract, exciting a purulent catarrh—in fact, an inflammation analogous to that which occurs in gout when urates are deposited in the tissues. A few remarks upon the physical and anatomical differences between calcareous deposits in the kidney and the urates closed the communication.

The Influence of Bile in the Assimilation of Food in the Intestines.

The *London Med. Record*, January 15, 1884, says that C. Von Voit (*Centralbl. für die Med. Wiss.*, March 14), records his observations and experiments upon a dog, of seventy kilogrammes weight, having a fistula of the gall-bladder. The absorption of albumen, hydro-carbons, and fat, was noted, with the following conclusions:

1. The digestion and absorption of albumen in the form of meat was not interfered with by the outflow of bile. The nitrogenous constituents of the feces and of the urine were the same in amount as before the operation. A dog fed exclusively upon meat maintained the same proportion also of these constituents. The maximum amount of meat that was given did not affect the flow of bile.

2. The digestion of grape-sugar was not diminished by the presence of the fistula; the excretion of urea reached as high an amount as previously. An exclusively bread diet was as well digested; while the weight of the animal, and the proportion of nitrogenous elements, were the same as under a mixed diet of bread and meat.

3. The absorption of fat, on the other hand, was

notably affected by the existence of the fistula. Whilst, in the normal condition, 99 per cent. of fat would be absorbed, and only 1 per cent. appear in the feces; in the fistulous animal, only 40 per cent. was absorbed, and 60 per cent. was voided unchanged. Small quantities even of fat in the food interfered with its digestion; whilst larger quantities caused diarrhoea, borborygmi, and offensive flatus, and the evacuation of fat unchanged. The grey color of the stools in icteric disorders, the author considers, depends not upon the coloring matter of bile, but upon fatty matters therein contained. Further investigations were carried out upon two more dogs, in which fistula had been established. In one of these the bile was collected every hour, and the amount calculated for the twenty-four hours. In the case of the second dog, the whole quantity that flowed was collected together. With regard to the composition of the bile, it was observed that the proportion of the sulphur and biliary acids varied with the nature of the food, varying from 4.01 to 4.61 per cent. The nitrogenous elements of dry bile varied from 3.7 to 3.9 per cent. The fluctuations of the sulphur compounds were still greater. The proportion and the absolute quantity of solid matter in the bile varied with the amount and time of feeding, reaching the highest an hour afterwards, and depending, it would seem, upon a reflex flow of blood through the filling of the intestine.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—To those who care to turn once in a while from physic to metaphysics, from science to philosophy, we recommend a pamphlet by Prof. W. T. Harris, entitled, "Philosophy in Outline" (New York, D. Appleton & Co). It is from the pen of a master.

—The "Red Cross Class" of the Agassiz Association have commenced the publication of a series of little books or tracts to disseminate information as to the preliminary treatment of sickness or injury. The first has reference to the treatment of fractures, carrying the wounded, bandaging, etc. (Address Dr. C. E. Warren, 51 Union Park, Boston, Mass.)

—Two numbers of the *Revue d'Hydrologie et de Climatologie Pyrénéennes* have reached us. It is a new journal, published at Toulouse, France, and will be interesting to hydrologists.

—The Proceedings of the Clay County, Mo., Board of Health make a closely printed pamphlet of 13 pages, containing the address of the President, Dr. J. M. Allen; an essay on Water, by Dr. J. R. Eaton; and a paper on Epidemics, by Dr. J. L. Jones. Such publications cannot fail to be a benefit to the community.

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INTESTINAL OBSTRUCTION.

Two cases recently reported to the Suffolk District Medical Society (*Boston M. and S. Jour.*), by Dr. John Homans, bring this question so prominently before us, that a few words on the subject will be appropriate and valuable.

A discussion on this subject at the last meeting of the British Medical Association, participated in by men of great experience, resulted, as might be supposed, in great diversity of opinion, some holding that early operative interference is called for in all cases of intestinal obstruction, while others of equal experience relegate it to a position after all other means have been tried and failed.

To an impartial reader of the various opinions on the subject, it would seem that the best treatment is that which, to a certain extent, is based upon the cause of the obstruction. Of course, it is impossible, in the majority of cases, to definitely decide the cause and the location of the cause, save by exploratory incision; but we usually can approximate it, that is to say, we can decide whether it is due to some trouble that threatens the rapid death of a portion of the gut, or whether the obstruction is due to some slow-proceeding cause, that will not be badly prejudiced by waiting. This will be made apparent to us by the presence or absence of constitutional symptoms.

In the two cases reported by Dr. Homans, the only symptoms were those produced by the retention of faecal matter in the system, such as general depression of the vital forces, but there were no acute symptoms; no pain (of any moment) no faecal vomiting, no fever nor acceleration of pulse; hence he waited until all other measures had failed, when, upon opening the abdomen, he found (in both cases) cancer of the descending colon, near the rectum, which completely occluded its calibre. Artificial ani were made, and in one case the patient survived for ten months, ultimately succumbing to the results of cancerous deposits throughout the mesentery and omentum; in the other case, where the operation had been more protracted, and the handling of the intestines much greater, the patient died five hours after operation.

It would seem then that when with non-passage of *feces* we have high temperature and pulse, great pain and the usual indications of rapidly approaching damage to the intestine, we should cut down, and if we find the obstruction removable, as an invagination, a twist or a constricting band, remove it; while if it is due to cancer or some irremediable cause, we can make an artificial anus.

But when we do cut down, it seems to us very important that we should search until we have found the cause, rather than to accept Mr. Lawson Tait's advice to make an opening into the first loop of intestine that presents itself. Mr. Tait is an exceedingly high authority; but let us suppose that a cancer, causing the obstruction, exists at a point *between* the stomach and the first loop of intestine that presents—we cannot see how the patient's condition will be benefited by making the artificial anus at this point; while, again, experience demonstrates that when the opening is made high up in the intestine, the patient is much more likely to suffer from gradual emaciation and loss of strength, as might be expected from the abolition of a large portion of the digestive and absorptive surfaces of the body. In one of Dr. Homans' cases there was absolute obstruction for *seven weeks*, which strengthens the arguments for the expectant plan when urgent acute symptoms are not present. The intelligence of the surgeon must guide him in the treatment of intestinal obstruction, just as in all other matters, for no definite absolute rules for his guidance can be laid down.

A case suitable for operation is reported in the *Medical Age*, February 11, 1884. Here, as the result of a kick, peritonitis and obstruction occurred. Abdominal pain was intense and localized, there was stercoraceous vomiting, while enemas only brought away blood and coagula. The autopsy revealed invagination of the *cæcum*, the lower end of which had sloughed. In this case, cutting down, excising the gangrenous gut, and stitching together the healthy intestine, would have been a justifiable operation, and *might* have saved the boy's life.

ASTOUNDING MEDICAL LEGISLATION.

Of all the schemes to promote the deterioration of the medical profession by injudicious patronage, the most astounding is one that was lately introduced into the Virginia Assembly. The text of the bill runs as follows:

1. Be it enacted by the General Assembly of Virginia, that the sum of seven thousand five hundred dollars be and the same is hereby appropriated out of the treasury, as an annuity to the Medical College of Virginia, to be expended under the direction of the faculty of said college, who are hereby required to report annually to the Governor an account of the disbursement of the said sum of money.

2. That there shall be admitted to the said Medical College of Virginia, while this annuity is paid, free from all charge for tuition, except the sum of five dollars as a matriculation fee, as many students who are citizens of Virginia as there are members of the General Assembly, each member of which is hereby empowered to nominate, in each year, from his county or district, a student to the faculty of said college, who may prescribe the academic qualifications of the nominee.

The plan of "beneficiary students," as practiced by some medical colleges, notably one in Kentucky, is bad enough; but this scheme, which enables every member of the General Assembly of a State to appoint for free instruction every year some young man, is still more surely calculated to lower the standard of medical qualifications and work injury to the profession.

It has been cogently observed by a writer on this question that if free instruction is to be given to young doctors, why not to young aspirants to the bar? why not to clergymen? to civil and mining engineers? If *professional* men of any class are to be furnished for their special business—equipped for their life work—at State expense, why not have commercial and business colleges for clerks, and so on, without end? The *principle is wrong*. Public education can be justified only on the ground, that the citizen by being taught the elements of education is thereby better fitted to meet and discharge his duties to society *as a citizen*, in those functions which are common to all citizens. This reason utterly fails to apply to

professions and professional education. They are *special*, and *individual*, by the very terms of the statement—and therefore outside of the reason which vindicates public school instructions for the masses.

No one man has any claim on the public to be furnished with a business, or to be qualified for it, beyond every other man.

Gratuitous professional instruction at the public expense, is therefore a violation of common right, and a misapplication of the public money.

Already the excess of professional men in proportion to our general population has caused serious reflections, and this bill aims to make it worse.

The question is not a local one. It is not one of Virginia State politics. The medical graduates of her colleges have rights all over this country, and we claim that no State should flood our land with half-educated professional men.

EARLY OPERATIONS.

Far be it from us to advocate the unnecessary use of the knife, which is always a serious matter even in the most trivial operations, and one to be carefully considered in all its possible consequences, and the arguments pro and con to be carefully weighed; but the thought has been suggested by some recent remarks, whether our surgical results would not be much more satisfactory, if, when ultimate operation is inevitable, it be performed early, before the diseased process has assumed much magnitude, and before any implication of the system has occurred.

We have already noted Jonathan Hutchinson's advice about operating in what he felicitously styles the pre-cancerous stage of cancer, and we have laid stress upon Professor Gross' remarks "On Early Operation in Morbid Growths;" while now Dr. Goodell tells us that our women are very averse to being operated upon (for ovarian disease), hence their proneness to delay matters until they have become very weak.

To what do these remarks of eminent and experienced men point? To early operation; to the

removal of the nidus of death, before the system has become seriously impaired, and while the strength is of such a standard as to offer a reasonable hope that the results of the operation will not prove serious.

When a woman, whose age and family history make us think of cancer, presents herself with a nodule in the breast, would it not be proper to at once cut it out? In the majority of cases the operation would be but a trivial affair, even if the lump was *not* cancer, while the chances for radical restoration to health would be much greater than if we had waited for the nature of the disease to be made manifest to our senses as cancer, when the whole body would be probably more or less cancerous, and the system robbed of much of its vital power. The same rule would hold good in all diseased processes, wherein there is a probability that operative interference will be demanded at some more or less remote period, when the prospects for a successful issue will be diminished by this policy of delay.

PUERPERAL FEVER.

In a recent issue we gave a report of a most admirable address on the prophylaxis and treatment of puerperal fever, by Dr. T. Gaillard Thomas, of New York.

The views therein expressed have occasioned considerable comment among the professional brethren of Dr. Thomas, and a recent meeting of the New York Academy of Medicine was enlivened by a discussion of the paper, in which we regret to say that personalities, ostensibly in the form of good-natured repartee, but to an unbiased reader sounding very much like undignified insinuations, were indulged in between Drs. Thomas and For-dyce Barker. Aside from these personalities, the discussion is possessed of sufficient importance to warrant comment.

It will be remembered that Dr. Thomas maintained that puerperal fever is puerperal septicæmia, caused by the entrance of disease germs through some rent or tear that has occurred to the parturient parts during labor.

To this Dr. Barker does not accede, claiming

that while there is a puerperal septicæmia, yet puerperal fever is a disease *sui generis*—whether due to the introduction of a specific germ or not, he does not state. But the most important point on which Dr. Barker differs from Dr. Thomas, and in which most of those who participated in the discussion supported Dr. Barker, was as to Dr. Thomas's recommendation for the use of antiseptic vaginal and uterine injections as prophylactics. Dr. B. and his adherents claimed that not only did experience prove that they were not necessary, but that they are absolutely injurious, as affording a ready and frequent means for the introduction of disease germs. For the past two or three years Dr. B. has absolutely abandoned vaginal injections in normal cases, and his results have been more satisfactory than previously. After hearing the expressions of opinion, Dr. Thomas seemed inclined to modify if not to abandon this particular recommendation, though he still adhered, as did most of those present, and as will every sensible man, to his other recommendations, which, as we said at the time, really consist in scrupulous cleanliness of physician, patient, and attendants.

RUNNING FOR TRAINS.

We have just missed a train, and we missed it because we would not run.

This experience suggests to us to offer a few words of advice, through our readers, to the busy men of America who are in a chronic state of "*running for trains.*"

Even to one whose heart is sound, running, when not accustomed to such hurried movement, is certainly not beneficial to the delicate cords and valves of the heart; and should this organ be diseased, it must prove very injurious.

We all know that violent and tumultuous action is to be avoided when the heart is weak, and we also know that running is not the way to avoid it.

In our own experience we know several instances, where men who had previously supposed themselves to be *sound* have run for trains, and getting aboard have fallen exhausted into seats

from which they have been removed as corpses; and knowing such cases, we *never* run for trains.

Better miss a train than run the risk of running into the jaws of death; for this strain on the heart cannot prove beneficial to one that is sound, while it most positively will prove more or less disastrous to one that is weak. In this world of unsuspected physical pitfalls, it behooves us "*to make haste slowly.*"

NOTES AND COMMENTS.

"Miryachit" and "The Jumpers."

Dr. William A. Hammond, in a paper read before the New York Neurological Society, described a peculiar disease that is not uncommon in Siberia, and is known as "*Miryachit.*" It is characterized by excessive imitation, that is to say whatever the patient sees anybody else do, he at once does the same. To illustrate:

"We afterward witnessed an incident which illustrated the extent of his disability. The captain of the steamer, running up to him, suddenly clapping his hands at the same time, accidentally slipped and fell hard on the deck; without having been touched by the captain, the steward instantly clapped his hands and shouted, and then, in powerless imitation, he too fell as hard and almost precisely in the same manner and position as the captain."

This disease brings to mind the remarks made by the late Dr. George M. Beard, before the meeting of the American Neurological Association, in 1880, relative to the "*Jumpers*" or "*Jumping Frenchmen*" of Maine and northern New Hampshire.

In June, 1880, Dr. Beard visited Moosehead Lake, found the "*Jumpers,*" and experimented with them. He ascertained that whatever order was given them was at once obeyed. Thus, one of the jumpers who was sitting in a chair, with a knife in his hand, was told to throw it, and he threw it quickly, so that it stuck in a beam opposite; at the same time he repeated the order to throw it, with a cry of alarm not unlike that of hysteria or epilepsy. He also threw away his pipe, which he was filling with tobacco, when he was slapped upon the shoulder. Two jumpers standing near each other were told to strike, and they struck each other very forcibly. One jumper, when standing by the window, was suddenly commanded by a person on the other side

of the window to jump, and he jumped up half a foot from the floor, repeating the order. When the commands are uttered in a quick, loud voice, the jumper repeats the order. When told to strike he strikes, when told to throw he throws whatever he may happen to have in his hand. Dr. Beard tried this power of repetition with the first part of the first line of Virgil's "*Æneid*" and the first part of the first line of Homer's "*Iliad*," and out-of-the-way words of the English language with which the jumper could not be familiar, and he repeated or echoed the sound of the word as it came to him in a quick, sharp voice, at the same time he jumped, or struck, or threw, or raised his shoulders, or made some other violent muscular motion. They could not help repeating the word or sound that came from the person that ordered them, any more than they could help striking, dropping, throwing, jumping, or starting; all of these phenomena were indeed but parts of the general condition known as jumping.

I am not able (says Dr. Hammond) to give any certain explanation of the phenomena of "*Mir-yachit*" or of the "*Jumpers*," or of certain of those cases of sleep-drunkenness which seem to be of like character. But they all appear to be due to the fact that a motor impulse is excited by perceptions without the necessary concurrence of the volition of the individual to cause the discharge. They are, therefore, analogous to reflex actions, and especially to certain epileptic paroxysms due to reflex irritations. It would seem as though the nerve-cells were very much in the condition of a package of dynamite or nitro-glycerin, in which a very slight impression is sufficient to effect a discharge of nerve force. They differ, however, from the epileptic paroxysm in the fact that the discharge is consonant with the perception—which is in these cases an irritation—and is hence an apparently logical act, whereas in epilepsy the discharge is more violent, is illogical, and does not cease with the cessation of the irritation.

Certainly the whole subject is of sufficient importance to demand the careful study of competent observers.

Tuberculosis of the Testes.

To the New York Pathological Society (meeting January 9, 1884), Dr. A. G. Gerster presented the testes of three different patients which he had recently removed for acute tuberculosis. The first specimen was from a laborer, thirty-eight years old, who was recognized to have a hydrocele, but

whether simple or dependent upon disease of the testicle was not at first determined. There was no known cause for the condition; he denied venereal disease. Volkmann's operation for hydrocele was successfully performed, the wound healing in a perfectly normal manner; but, five weeks after his dismissal from the hospital, the patient returned, saying that he had passed a bad night, had had a chill, and had begun to lose flesh and strength. The testicle was then extirpated, and was found to show central tuberculosis, the hard, characteristic tubercular mass not yet having begun to break down. The second specimen showed a slightly more advanced stage of the disease, and was from a man thirty-one years of age, who had suffered acute orchitis and epididymitis of traumatic origin. Six or eight weeks after the injury the testicle was painful, swollen, and hard, the swelling extending up the cord some distance. The patient suffered chilliness and sweating, and presented a condition demanding removal of the testicle, which was done. The chief interest of the specimen related to the condition of the tunica vaginalis, which, instead of being smooth and hard, resembled very much the synovial membrane in cases of tuberculosis of the joints. There was incipient breaking down of the tuberculous deposit centrally. In the third case there had been chills, emaciation, loss of appetite, and swelling and pain of the testicle, and, on removal, the organ was found to consist almost entirely of broken-down tissue; the tunica vaginalis had become obliterated. Dr. Gerster remarked that the diagnosis could be made much earlier in these cases than was formerly done, and lead to proper treatment in the way of extirpation, whereas it used to be the practice to let the condition remain until a fistulous opening formed in the scrotum, and the case reached the state falsely called *hernia testis*. In the discussion which followed, Dr. Gerster said that there had been no physical signs of tuberculosis in any of the other organs of the body. The other general symptoms—chill, sweats, etc.—disappeared on removal of the diseased testicles.

Slop Diet.

There can be no question in the mind of any thoughtful man that diet must have a great influence upon the course of disease processes, hence it is that we note the following reply, in the *Lancet*, January 12, 1884, to one who writes to inquire more fully about slop diet:

The objects aimed at in giving slop diet may be—(1) depletion of the system by cutting off the

supply of nitrogenous and combustible material ; (2) the securing of rest to the digestive organs ; (3) the avoidance of the ills which follow upon the taking of food upon which the digestive and assimilative organs are unable, through debility or actual disease, to exert their full function. Experience has shown that cutting off all food from healthy men causes death in about five days, and is attended with great suffering. If water alone be allowed, the suffering is very greatly lessened, and life can be prolonged for about the same number of weeks. The introduction of water entails no "work" upon the digestive or assimilative organs, and therefore it admirably fulfils the conditions of "slop diet," whether required for any one of the three objects mentioned above. It is therefore the best "slop diet," and we believe that as such it is not sufficiently appreciated by the profession. Saline solutions stand next in order of merit, requiring no "digestion," and undergoing little, if any, change when passing through the assimilative organs. Saccharine solutions must rank next; they are readily absorbed, but possessing distinct nutritive value, they are not so depletive as water, and, moreover, being liable to undergo fermentation in the alimentary canal, they do not afford such complete rest to that organ. They also have the disadvantage of being less palatable than the former. Decoctions of starch require distinct "digestion" and "assimilation," possess high nutritive value, if unabsorbed are liable to fermentation, and may leave a considerable residue of undigested matter to pass along the intestines. Solutions of albumen must be placed at the bottom of the list, as requiring digestion and assimilation, and as possessing the highest nutritive value, being "tissue-forming" as well as "force-producing."

Acute Pyæmia of Urethral Origin.

To the New York Surgical Society (*Med. News*, December 22, 1883,) the President (Dr. R. F. Weir) presented kidneys and heart illustrating acute pyæmia of urethral origin. They were removed from the body of an apparently healthy man, twenty-five years of age, who had been subject to gleet discharges traceable to stricture. He had had instruments passed from time to time during the summer and in the autumn. Last Sunday his attending physician introduced a sound, No. 23 French, which passed into the bladder without violence, and with no more difficulty than had been produced on all the other occasions. A few drops of blood escaped. On Mon-

day the man was seized with a severe chill. When Dr. Weir saw the patient he had a temperature of 105° F., and he supposed it to be due to malaria, as he knew that the patient had suffered formerly from such chills, which had invariably yielded to quinine. The temperature, however, remained high, and within forty-eight hours afterwards he began to develop joint pains and effusions. He complained of no distress in the bladder, but said that once or twice he had noticed that the urine was very slightly tinged with blood. The man became so delirious that he was removed to the hospital, where he died twenty-four hours afterwards. Before death, evidence of pericarditis and endocarditis was detected, and the opinion was formed that it was pyæmic. At the autopsy multiple infarctions with grayish centres were found in the cortex of the left kidney, the right being comparatively unaffected. Pericarditis and recent valvular disease, with excavation at base of one of the cusps (ulcerative endocarditis), were found, and infarctions in the centre of the substance of the heart. The rapidity of the course of the case was especially interesting. Dr. Weir had not seen in acute pyæmia heart lesions so distinctly marked as in the present instance. There were no lacerations of the urethra, but evidences of croupous cystitis were present.

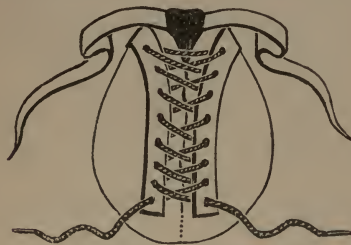
Tubercular Peri-urethritis.

From the *Centralb. für Chirurgie* we learn that at the recent Congress of German Naturalists and Physicians, Dr. Englisch presented a paper with this title. The disease, he says, begins as an inflammatory tumor in the bulbous portion, usually as an inflammation surrounding the urethra, or involving Cowper's glands. It extends constantly, as well toward the surface, leading to perforation of the skin, as in other directions toward the urethra, prostate gland, rectum, or epididymis. The urethra is often perforated, usually at the junction of the bulbous and membranous portions, though sometimes in the pendulous part. The disease is characterized by a growth of fungous granulations resembling very closely those seen in tuberculosis of the articulations. It occurs in tubercular and tubercularly disposed individuals, and may arise from urethritis, specific or otherwise, injuries of the urethra or perineum, or anything which occasions or is accompanied by inflammation. The course of the disease is usually slow, yet in some cases it is quite rapid. If there is already a pulmonary affection it now progresses more quickly, and if none has existed it is now developed. Since the fungous granulations

present great resistance to all modes of treatment, there is but little to be accomplished in the way of cure. New granulations are continually formed, and any attempts to close the fistula are unsuccessful. The retention of a catheter for a sufficiently long time to allow of their closure, is rendered impossible by reason of the quickly-produced vesical catarrh. Hence the therapy is narrowed down to attempts at improving the general condition by means of constitutional remedies.

A New Method of Strapping for Hydrocele.

To the Suffolk District Medical Society (*Boston M. and S. Jour.*, February 14, 1884), Dr. J. C. Warren showed a chamois-leather bag which he had devised for the purpose of exerting pressure on a small collection of fluid left in the tunica vaginalis remaining after an operation for radical cure. The bag can easily be applied by isolating that portion of the scrotum containing the testicle to be compressed and forming a pedicle, which is preserved by tightening the chamois-leather string. The bag is then laced from above downwards, and if it has been made to fit snugly, exercises a gentle and equable pressure. If it is



LEACH & GREENE,
BOSTON.

necessary to increase the pressure, a few turns of a common narrow roller bandage around the equator of the globular mass are all that is necessary. This bag is free from the well-known discomforts of plaster, is easily made and applied, and can be removed and re-applied by the patient himself as often as is desirable, thus avoiding excoriation at constricting points. In the single case in which it was used the effusion promptly disappeared, and has not since returned at an interval of nine months.

The Brain and its Influence on Mental Faculties.

The *Brit. Med. Jour.*, January 19, 1884, says: A recent discussion on the weight of Turgeneff's brain has called the attention to the subject of human brains, and a scientist, M. Nikiforoff, has published in the *Novosti* an article, in which he

states that the weight of the brain has no influence whatever on the mental faculties. The average weight of a man's brain is, according to Luschka, 1,424 grammes, of a woman's 1,272 grammes; Krause gives the averages as 1,570 and 1,350 respectively. The maximum weight is said to be 1,600 grammes, and the minimum 800 grammes. The brain of the celebrated mineralogist, Hausmann, weighed 1,206 grammes. It ought to be remembered that the significance of the weight of the brain should depend upon the proportion it bears to the dimensions of the whole body, and to the age of the individual. Byron died at the age of thirty-six—the great geometrician, Gauss, at seventy-eight years of age; the brains of the two should, therefore, not be compared. It is equally important to know what was the cause of death, for long disease or old age exhaust the brain. To define the real degree of development of the brain, it is, therefore, necessary to have a knowledge of the condition of the whole body; and as this is usually lacking, the mere record of weight possesses little significance.

Modifications in Muscular Structure after Nerve-Section.

From the *Rev. Scientifique*, January 12, 1884, we learn that M. Babinsky has recently presented a communication on this subject to the Académie des Sciences. These modifications consist essentially of simple atrophy of the contractile substance, with multiplication of the sarcolemma cells. Babinsky shows that atrophy of the contractile substance progresses in direct proportion to the development of the protoplasmic structure; this dissociates the primitive cylinders, and thus brings out the field of Cohnheim much more distinctly than in the normal state; it accumulates in certain fasciæ, at their periphery and between the sarcolemma and the striated substance, in other fasciæ at their central part, so that the striated substance is turned back toward the sarcolemma. This last disposition is particularly interesting, because the altered muscular fibres are exactly similar to muscular fibres in process of development.

Experiments on the Pneumogastric Nerve.

Before the Academy of Medicine in Ireland (*Brit. Med. Jour.*, January 26, 1884), Dr. Scott read a preliminary communication concerning experiments on the central end of the pneumogastric nerve. In some experiments performed by Dr. Purser and himself on the central end of the vagi, certain facts were observed differing from

those hitherto described. First, on section of one vagus, the heart-beat was not retarded, but there was a slight fall of blood-pressure; secondly, on section of the vagi, a considerable rise of pressure ensued, associated with a retardation of the heart-beat, these being independent of the stoppage of respiration. The foregoing facts would show that the heart was inhibited by other means than the vagi. The respiration also was differently affected when one or both vagi were divided. In the former case, the stoppage was always followed by expiration; in the latter, by inspiration.

The president testified that the tracings exhibited were accurate copies of the original tracings. They were very curious in a great many respects, and the phenomena were extremely complicated, indicating not only the action on the nerves, but the influence produced by the asphyxia.

Dr. Scott, in replying, observed that it was only after the section of both vagi that the beats made their appearance.

The Relation of the Medulla to the Sexual Function.

In the *Practitioner*, February, 1884, Dr. Alexander Harkin advances arguments in favor of Van der Kolk's notion that this part of the nervous system is particularly related to the genital function; and believes there to be a "sexual centre," as well as "respiratory," "convulsive," and other centres in this region. He points out the association between sexual excess and neurotic affections, notably epilepsy; and thinks there is good reason for the belief that so-called "neurasthenia spinalis" and "abnormal seminal losses" depend on a congested state of the medulla. He selects three cases in which the symptoms of these conditions were very marked, in each of which striking relief and even cure was effected by wet cupping over the nape of the neck. Cold douches in the same region, and the administration of bromide of potassium and belladonna, are often, he says, as effectual. Dr. Harkin's views are certainly worthy of consideration; and his line of practice, combined with precepts intended to strengthen the will and improve the physical condition, is one which should not be disregarded in dealing with those unfortunate subjects of a hypochondriasis induced by perverted and unnatural sexual excitation.

The Thirteenth Cranial Nerve.

The *Lancet*, February 2, 1884, says: Regarded physiologically, the chorda tympani hardly seems to be a branch of the facial nerve. Dr. Sapolini,

of Milan, has been working at the anatomy of the chorda tympani, and comes to the conclusion that it must be regarded as a nerve *sui generis*. He believes it contains motor and sensory fibres. Its deep origin is placed about the posterior end of the floor of the fourth ventricle, whence it traverses the floor of this ventricle in a forward direction. It leaves the surface of the pons Varolii quite close to the auditory nerve, with which it exchanges many filaments. The nerve, once at liberty, is composed of two filaments, and is embraced by the seventh and eighth nerves, with which it pursues its course through the internal auditory meatus and the geniculate ganglion. The rest of its course, under the name of the chorda tympani, is well known.

The Physiology of Deglutition.

Some admirable studies on the phenomenon of swallowing were published recently in Berlin by the Physiological Institute from the pen of Dr. S. Meltzer, now of New York city. One of these was with reference to the mechanism of deglutition, its causation and suspension, the other on the irradiation of its action, and the general import of the act.

These essays are not only excellent examples of physiological research, but their author has given them practical applications. He finds, for instance, that swallowing increases cardiac action and derives from this some sound precepts for the treatment of fainting. In severe choking and coughing spells, rapid and frequent swallowing will relieve the local irritation. We hope this investigator will continue his researches.

An Inhalation for Catarrh, Coryza, Asthma, etc.

M. St. Martin recommends this formula in the *Jour. de Med. de Paris*:

	Parts.
Acid. carbolic,	5
Ammon. pur. liq.,	6
Aque dest.,	10
Alcohol,	15

Soak some cotton wool with this mixture, and breathe this vapor from a wide-mouthed bottle.

Acute Aortitis.

In the *Gaz. Med. de Paris*, M. Peter gives the following diagnostic points in this disease:

An agonizing pain at the level of the preaortic region; a burning sensation, sometimes excruciating; and a dyspnoea, which is never wanting, and which is especially characteristic, because on auscultation of the respiratory organs nothing can be discovered to account for it.

SPECIAL REPORT.

NO. XVI.—OPHTHALMOLOGY.

BY C. S. TURNBULL, M. D.,

Oculist to the German Hospital, Philadelphia.

(Continued from page 318.)

Sattler also introduced lochial secretion into the eyes of an infant. After forty hours blennorrhœa developed. This proves by direct experiment that blennorrhœa is due to infection with lochial secretion, and that the conjunctival sac of the new-born is the best soil for breeding the micrococci of blennorrhœa, when in a mixture of various kinds of bacteria. Probably the micrococcus of blennorrhœa floats about the air. It enters the vagina, there undergoes a sort of preliminary culture, and thus acquires the peculiar power of producing, under certain favorable conditions, a blennorrhœic inflammation in the male urethra, and the conjunctiva. The most rational form of treatment would, therefore, seem to be the antiseptic.

Cas d' Auto-inoculation Vaccinate ayant Donné lieu a une Ophthalmic Diphthero-purulente.

Fifty-six days after the development of a vaccine pustule on his own arm, Stocquart observed purulent conjunctivitis in the left eye, followed by false diphtheritic membranes on the conjunctiva. Cured by antiseptic treatment. Probably some of the vaccine had got into his eye, as with the exception of the arm and eye no other part of the body was affected.

The Treatment of Gonorrhœal Ophthalmia. The Lancet, October 14, 1882, p. 345.

In three cases of gonorrhœic ophthalmia, Bader obtained good results by the use of a salve consisting of one grain of red precipitate and one-fifth of a grain of atropine, to an ounce of vaseline.

Simi (*Sulla Ophthalmia Purulenta Provocata come un Mezzo Terapeutico.* Bell. d' Ocul., vol. v. 3, November, 1882,) favors the inoculation of blennorrhœic pus in cases of pannus. In a view of the excellent result frequently obtained, so powerful a remedy should not be simply discarded. The danger to the cornea from blennorrhœa seems the less to the author, the denser the pannus which protects the healthy parts of the cornea like a coat of mail at the height of the inflammation. If jequirity should meet expectations, he would, of course, prefer it, as the intensity of the inflammation could be regulated.

Dianoux (*De l' Ophthalmie Purulente Provoquée comme Moyen Therapeutique.* Le Prog. Med., 1882, Nos. 41 and 43,) reports two cases of granular

pannus, and one of total sclerosis of the cornea, which were cured by the inoculation of blennorrhœic pus. In the latter case improvement was very moderate. Dianoux hopes to produce a milder form of blennorrhœa by inoculation with Neisser's cultivated micrococci, and believes that obstinate cases of trachoma with intact cornea could be cured by such an inoculation.

L' Ophthalmia Purulenta Artificiale Prodotta dal Jequirity. Boll. d' Ocul., vol. v. 3, Nov., 1882.

Moyne was the first in Italy to make experiments with jequirity. For three days applications were made with an infusion of jequirity (32 pulverized beans to 1,000 grms. of water) to the eyes of three children suffering from trachoma, who had been treated for four months with nitrate of silver and tannine without much success. In one case there was considerable reaction; the lids swelled, the cornea became slightly hazy, and on the fifth day purulent secretion set in. This state of affairs soon ended, and on the twentieth day all the symptoms, as well as the trachoma, had disappeared. In the other two children the inflammation was much milder, nevertheless the granulation soon disappeared. In all three cases the cornea was not pannous.

Jequirity. Boll. d' Ocul., vol. v., 4, December, 1882.

Simi tried jequirity according to Wecker's method, in two cases of trachoma and pannus. Inflammation set in, as expected, and culminated on the fourth day; on the twelfth day it came to an end. As regards the result, no change could be seen in one patient, one of whose eyes was staphylomatous, and the other partly so, either in the trachoma, which had existed for four years, or in the pannus. In the other patient the granulations had become smaller, while the pannus had not perceptibly diminished, though the patient declared he could see better.

Snell, Ophth. Rev., vol. i., Oct. 1882, p. 346, obtained good results with boracic acid in purulent catarrhal, and some kinds of phlyctenular ophthalmia. According to the intensity of the inflammation, he uses a stronger or weaker solution (10–25 grains to the ounce).

Ferguson, Ophth. Rev., vol. i., Nov. 1882, p. 363, recommends boracic acid in acute catarrhal and purulent ophthalmia. He uses it thus: After carefully ectropionizing the lid, boracic acid, in the form of an impalpable powder, is dusted upon and then washed off. If the action is too severe, he employs a solution.

Landolt, Arch. d' Ophth., reports in detail on the production of hydrogen dioxide, its physical and

chemical properties, its physiological action and its importance as an antiseptic. It acts as such by setting free oxygen in a nascent state, directly destroying the bacteria, and mechanically disintegrating the pathological products, and thus aiding their removal. He recommends it diluted with water, especially in purulent conjunctivitis, old corneal ulcers, and purulent affections of the lachrymal apparatus, in all of which he obtained good results. It produces no pain, and has no injurious influence on the eye, provided the preparation be pure, for controlling which he gives the necessary reactions.

Magnus, Klin. Monatsbl. f. Augenheilk., vol. xx., p. 396, extracted a bit of glass from the cornea of the left eye of a lady, which had been there for two years and three months without causing any marked irritation.

Pathogénie des Kystes de l'Iris. Leur Production Artificielle par des Greffes de Lambeaux de Cornée sur la Membrane Iridienne. Acad. des Scienc., Jan. 15, 1883 :

Masse continued his experiments on rabbits for the artificial production of cysts of the iris. He introduced a small piece of cornea, abscised with Beer's knife, into the anterior chamber, where it attached itself to the iris and became opaque and vascular, the blood-vessels coming from the iris ; genuine cysts with transparent walls then developed, which undoubtedly grew out of the corneal tissue transplanted upon the iris.

(Basel.) *Un Cas de Tuberculose de la Choroïde, Inoculée dans la Chambre Antérieure de Lapins.* Arch. d'Ophth., vol. ii., No. 6.

Hirsch experimented upon the eyes of rabbits in regard to inoculation masses of the choroid. He enucleated the right eye of a young man of seventeen, without any hereditary taint, which gradually had lost its sight after nutritive disturbances, while a tumor gradually developed to the inward of the cornea, whose nature could not be definitely determined. From this tumor a fistula extended inward to a cavity occupying the greater part of the interior of the eye, the walls of which consisted of a caseous mass, which included the deeper layers of the sclera and most of the choroid, while only the anterior and a small part of the temporal section of the eye was comparatively healthy. This caseous mass was introduced into the anterior chamber of three rabbits, where it produced an eruption of tubercles on the iris after the lapse of twenty-two to thirty-nine days. These tubercles, when used for inoculation, produced the same result after twenty-three days. Unfortunately, the experiments could not

be continued, as all the animals perished by an accident. In the inoculated tubercles, neither giant-cells nor tubercle bacilli were found. Nothing abnormal in the thorax or abdomen.

Recherches Microscopiques sur les Ossifications Choriodiennes. Rec. d'Ophth., Dec., 1882.

Hoene gives the microscopical description of two cases of bone-formation in the choroid. Hoene thinks that bone develops in the choroid in embryonic tissue, which is the product of exudation of the choroid. This exudation becomes organized, is changed to connective, and finally to bony tissue. The precise localization, and the relation of the osseous tissue to the choroid, therefore, depend only on the intensity and localization of the inflammatory process.

On Cataract and Other Affections of the Eyes in Persons Struck by Lightning. V. Graef's Arch. f. Ophth., vol. xxviii. 3, p. 255.

Leber reports the case of a sea captain of thirty-one, who had been struck by lightning, burning the skin of the left side of his body down to the thigh, and producing total hemiparesis of that side. After these affections had been cured, cataract developed in both eyes in the course of a few months, in the left more than in the right, while there was also partial atrophy of the optic nerve, mydriasis, paralysis of accommodation of that eye. The result of the operation was comparatively good. Five similar cases of cataract were found in searching through the bibliography, eight cases of amaurosis in pre-ophthalmoscopic times, and periodic amaurosis or amblyopia respectively in four cases, among them the interesting one of Reich, of rupture of the choroid. Generally both eyes are affected, rarely (Sæmisch) only one. The electric discharge is the cause of all these affections, no matter whether lightning strikes the body itself or only passes close to it. The direct physical, chemical, catalytic action of the electric discharge upon the lens is the cause of the cataract.

Benson reports a case of *cholesterine cataract* in a child a year old, whose entire lens was a mass of bright yellow crystals.

CORRESPONDENCE.

Ergot in Convulsions.

EDS. MED. AND SURG. REPORTER :—

In a recent number of the MEDICAL AND SURGICAL REPORTER I noticed a short note from Dr. A. N. Carrigan, Washington, Arkansas, in which he speaks of the good effects of ergot in convulsions; and I wish to add my mite corroborative. Strange indeed, in the discussion referred to, none of the

eminent men present should have alluded to the drug at all, when it exercises such an influence over (almost) all forms of convulsions. In the puerperal variety, my experience with it, in combination sometimes with morphia, has been most satisfactory; and in the convulsions of children, with or without the last-named drug, nothing that I have used has been so reliable. In the latter variety I have never had to give more than two doses hypodermatically, with appropriate after-treatment to restore the patients.

Case after case could be reported to show its efficacy, but will only give the outlines of one. On August 11, 1883, was called in the afternoon to see Emma F., aged three years, and found her in a convulsion, and learned that she had had them every few minutes from about 8 a. m., in a very severe form. As soon as possible I inserted twenty drops fl. ex. ergot in her arm, and in a short time had the satisfaction of seeing an improvement in her condition. Another insertion half an hour afterwards restored her to perfect consciousness, when, after giving necessary medicines for the cause (irritation from worms, and costive bowels), I left, to find her sitting up on my return next day.

Two cases of the puerperal form have been brought to a safe termination with it; one requiring morphia to be added, the other, and seemingly the worst, not. Let others try the remedy, and report their experience. Yours truly,

A. L. PURDOM.

Hickory Creek, Ark., Feb. 18, 1884.

NEWS AND MISCELLANY.

Fortunes Made by Charlatans.

The *Pacific Med. and Surg. Jour.* very wisely says that it is not surprising that crafty men who love money more than virtue and truth, should go into the nostrum trade when they behold the fortunes that are sometimes made by an ingenious mixture of fraud and physic. Most persons have noticed the advertisement of "Dr. Parr's Life Pills," with a cut of the venerable old gentleman, whose association with the pills is as foul a slander on his memory as the cut is a burlesque on his true figure. Those pills were a fabrication of Mr. Ingram, the founder and late proprietor of the *London Illustrated News*, who made his fortune by the fraudulent speculation. Through his wealth thus accumulated he gained a social position in society, and finally procured his election to Parliament. He used to say that having noticed that purchasers generally gave preference to goods advertised with a cut, he took the hint and fabricated a cut of Dr. Parr in connection with the use of his name, and that this proved an element of success in his pill business. We have in California a number of adventurers in the same field who employ the same trick, sometimes varying it by supplying the portrait with their own cheeks. As a rule, this class of advertisers hold the first rank as impostors and put forth the most unblushing falsehoods. We do not know, however, of any one who has succeeded like Mr. Ingram in gaining a foothold in good society. It is not uncommon for men or women of high stand-

ing to patronize quacks, despising them at the same time. If they recognize the pretended "doctors" in social life, such men as Li-po-tai would have the run of a number of aristocratic dwellings in San Francisco. The experiment was tried many years ago in Philadelphia by Swaim, the original panacea man, a vulgar and illiterate fellow who made a fortune by his medicine, the prescription for which he had got from a New York physician for his own use. Swaim built a splendid mansion on Chestnut street and invited the aristocracy of the city to a grand ball on the occasion. But the aristocracy did not come, and Swaim's money failed to open to him the doors of his fashionable neighbors. Brandreth and Jayne among others, made fortunes by deceptive advertising, but they never rose in society above the money mark. An itinerant adventurer once told us that whilst traveling on the Mississippi river and being out of employment, he purchased of an apothecary in a Western city all his old stock of purgative pills and retailed them on the steamboats and elsewhere as Brandreth's pills, with the most surprising results. A single dose often cured, and he could have got all the certificates he might want in favor of Brandreth's pills. The foundation of Jayne's fortune was a chronic diarrhoea, which was cured by a prescription of a doctor in New Jersey. Jayne got the prescription, went to Philadelphia, procured the services of an impecunious and smart young graduate in medicine to write up his lying, and as the cholera was approaching, mounted the flood which leads to fortune by flaming advertisements of "Doctor" Jayne's Carminative. Then came Jayne's Expectant and Jayne's Vermifuge, and so forth, and in a very few years Jayne was able to build one of the costliest edifices in Philadelphia. He became also a celebrated "doctor," though he knew no more of medicine than of Sanscrit when he began his professional career.

Medical Society of the State of Pennsylvania.

The thirty-fifth annual meeting will be held in Philadelphia on Wednesday, Thursday, and Friday, May 14, 15, 16, 1884, commencing on Wednesday, May 14th, at 9 a. m.

Amendment to be acted on, by Dr. H. Leffmann:

No paper shall be read before this Society unless the same shall have been previously read, either in full or in abstract, before a County Society, and by it referred to the State Society.

Appointments for 1884:

To prepare address in Surgery, Dr. John B. Roberts, Philadelphia.

To prepare address in Obstetrics, Dr. Jacob Price, West Chester.

To prepare address in Hygiene, Dr. Benjamin Lee, Philadelphia.

To prepare address in Mental Disorders, Dr. Alice Bennett, Norristown.

To prepare address in Medicine, Dr. W. H. Daly, Pittsburgh.

To prepare address in Ophthalmology, Dr. Wm. S. Little, Philadelphia.

Secretaries of County Medical Societies are earnestly requested to forward at once complete lists of their officers and members, giving the post-office address of each.

Every *delegate*, before admission, shall produce a certificate of delegation, signed by the President or Secretary of his County Society.

Every *permanent member* (not a *delegate*), before admission, shall produce a certificate of good standing in his County Society.—(*Extract from Constitution.*) Wm. B. ATKINSON, M. D.,
Permanent Secretary.

Railroads.—The Pennsylvania Railroad and its branches, and the Philadelphia and Reading Railroad and its branches, will issue excursion tickets at the rate of two cents a mile. All who desire to avail themselves of this should notify the Permanent Secretary, stating the number of excursion orders required, and the railroad over which the party must travel to the place of meeting.

First Aid to the Injured.

One of our funny exchanges gives the following:

1. Bites of all sorts are painful, and if not treated with expedition and skill, they sometimes prove very dangerous. The most common kinds are those received from dogs, mosquitoes and bears. The rarest kinds are trilobites and jacobites.

2. One seldom, if ever, gets a bite when out fishing.

3. If about to be bitten by a dog, while serenading or foraging in a melon patch, immediately take some violent exercise, in order to preserve a good circulation. For instance, run a mile or so without stopping.

4. Never stop running because there is a man with a club apparently chasing the dog—sometimes he is encouraging him.

5. If this does not accelerate the action of the heart, climb the nearest tree.

6. Don't get down again for the purpose of rescuing the sample of your trousers. This is one of the dog's perquisites, and he wants it for his scrap-book.

Paper Towels for Surgical Purposes.

In the surgical dispensary of the Philadelphia Polyclinic, Dr. Roberts has been using, with much satisfaction, Japanese paper handkerchiefs for drying wounds. Sponges are so seldom and with such difficulty perfectly cleansed after being once used, that they are never employed in the clinic. Ordinary cotton or linen towels are much preferable to sponges, which, if dirty, are liable to introduce septic material into wounds. The paper towels, however, answer the same purpose as cotton ones, and are so cheap that they can be thrown away after being used. They cost from \$6 to \$7.50 a thousand. The cost of washing a large number of ordinary towels is thus avoided. The paper towels are scarcely suitable for drying hands, after washing, unless several towels are used at once, because the large amount of moisture on the hands soon saturates a single towel. For removing blood from wounds, a paper towel is crumpled up into a sort of ball, and then used as a sponge. Such balls absorb blood rapidly. The crude ornamental pictures, in color, on the towels, are of no advantage, nor are they, as far as known, any objection.

Pasteur's Enthusiasm.

The French National Society for the encouragement of Agriculture, at its fifth anniversary banquet recently, presented its annual Cup of Honor to M. Pasteur. In returning thanks, M. Pasteur said he was not insensible to praise, but yet praise troubled him, because it belonged to the things of yesterday, and true science always looked forward to new achievements. "There is a great field still to explore," he added. "How many plagues and diseases are there yet to subdue! But have confidence; new methods are discovered, and methods are the soul of science. The great fact evidenced by our meeting here to night is, the alliance between science and practice. You were the first to believe in the triumph of the experimental method. You have enabled me to carry into the domain of fact what formerly would have remained in the region of hypothesis. Your farms have been, so to say, branch establishments to my laboratory. The faith which animated me you have shared, and you have largely contributed to help me to add to the wealth of France, which has abundantly required me."

The Gastroscope.

The *Med. Press and Circular* tell us that Mr. J. Lefter, of Vienna, has constructed a singular modification of the microscope, to which the name of gastroscope has been given. Its use is for exploring the interior of the stomach. It consists of a metal tube, 65 cm. long and 15 mm. thick, bent at an angle of 150° at about one-fourth of its length from the lower end. At the lower extremity is contained an incandescent electric lamp for illumination of the interior of the stomach and an objective, at the back of which is a prism to reflect the pencil along the length of the tube; at the bend it is again reflected by another prism to the eye-piece. Provision is made for a circulation of cold water to prevent the lower end of the tube becoming inconveniently hot.

Physicians as Sanitarians.

A Washington (D. C.) physician had a suit brought against him for \$1,000 damages for failing to take the proper measures for preventing the spread of a contagious disease in the family of the complainant. A contemporary raises the question as to whether it is the function of the physician to prevent disease, and says that if it is, he should certainly be remunerated for such service. With this view, we are entirely in accord. A physician is undoubtedly called upon to do all in his power to stay the progress of contagious disease, but he should also make charges for such services, and be enabled to collect such charges.

Correction.

The inventor of the scrotal compressor described in the *REPORTER* recently, is Dr. G. Miliano, 207 East 13th street, New York, not *Miliaro*, as the types made us say.

—The "Proceedings of the Medical Society of Kings county, N. Y.," has suspended publication after eight years of existence.

OBITUARY NOTICES.

DR. CHARLES L. MARTIN,

Of Allentown, Pa., died November 26, 1883, of cerebral effusion. He was in his sixty-fourth year, and was graduated at the University of Pennsylvania in 1841. The whole of his professional life was passed in Allentown, where he enjoyed an extensive practice.

Items.

—The President has appointed Surgeon Gunnell to succeed Surgeon-General Wales as Surgeon-General and Chief of the Bureau of Medicine and Surgery of the Navy.

—A Spanish medical journal states that there has been born in Madrid an infant with neither arms nor legs. In other respects it is well formed and healthy, and is now five months old.

—A bill has been passed by the New York Legislature appropriating \$50,000 for the enforcement of the act designed to stamp out pleuro-pneumonia and other contagious diseases among the cattle in that State.

—It is reported that owing to the fire which destroyed the establishment of Powers & Weightman, together with large quantities of Peruvian bark, there will be a rise in the price of quinine amounting to about fifty cents.

—By the addition of ten parts of collodion to fifteen of creasote (says the *Revue de Thérap.*) a sort of jelly is obtained which is more convenient to apply to decayed teeth than is creasote in its liquid form.

—The *American Druggist* says that the clinical thermometer was used and commended by Antonius De Haen one hundred and twenty-nine years ago. Its re-introduction occurred fifteen or eighteen years ago.

—The International Otological Congress will be held at Basle, September 1, 2, 3, and 4, 1884. The titles of communications intended to be made to the Congress should be made known to Dr. Burkhardt-Mérion, of Basle, before the 15th of May.

—Under the supervision of Dr. Rush Huidekoper, several specimens are being prepared in the new Veterinary College of the University of Pennsylvania. This work is preparatory to the formal opening of the new department in the early fall.

—Surgeons J. S. Billings and J. S. Brown, U. S. A., have been detailed to attend the International Health Exhibition which meets at South Kensington in May next, and to represent the Department at the International Medical Congress which will convene at Copenhagen in August next.

—It is said that the tooth manufacture of the United States amounts to 10,000,000 teeth per annum. There are twelve manufactories, but one of them, founded in 1864, makes half the number. The value of these teeth is a million dollars. The materials of which they are composed are feldspar, kaolin, and rock crystal.

—The daily press reports 542 suicides for 1883 in Paris, a gain of sixty-three over 1882. The

choice of means of death shows that hanging is not as popular as it is in England, for while only eighty-one hung themselves, 217 used firearms, and 148 drowned themselves. By thirty-seven, the more scientific expedient of burning charcoal in closed rooms was adopted.

—The Meharry Medical Department of the Central Tennessee College, in Nashville, has just graduated eight colored physicians. Thirty-five young negro men had previously been graduated from this school, and it is stated that they have been successful in their work, and have been well received and aided by the resident white physicians.

—The turf surrounding the mansion of Mrs. A. T. Stewart, on Fifth Avenue, New York, is said to have been taken from the grounds of the old New York Hospital, at Broadway and Pearl street, and to be about one hundred years old. When the hospital buildings were torn down some years ago, Mr. Stewart purchased the sod from the Governors, and had it relaid about his new house, which was then in course of erection.

—According to Dr. Sach, of Buenos Ayres, in the *Popular Science Monthly*, there is no danger of an exhaustion of the quinine supply. The experimental plantation in Java and the Island of Reunion have been very successful, and besides these nurseries, the trees have been cultivated in Bolivia by the million for ten years. At three places in the last-named country, taken as they come, the number of trees growing is given severally at 70,000, 20,000, and 3,500,000.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

In reply to "Medica" in your issue of the 23d ult., I would say to his first query that his patient has a "lacerated cervix," which can be remedied by an operation. Then cease giving the so-called "emmenagogues" and "tonics" for awhile, and put her upon some good emulsion of cod liver oil, say Phillips' palatable emulsion, as a restorative.

To his second query: Use astringent suppositories.

R. L. M.

Anæsthetics in Labor.

EDS. MED. AND SURG. REP.—

I shall be greatly indebted to you for any information you may be pleased to give me on the following points in relation to *anæsthetics in labor*:

1. What is the best anæsthetic for such cases?
2. What is the effect of chloral hydrate administered previous to the anæsthetic?
3. Do you find that it arrests the uterine contractions so as to retard delivery?
4. What effect, if any, does it have on the child, either before or after delivery?
5. Does it have any tendency towards the production of post-partum hemorrhage?

Any other information of interest not covered by these queries will be gladly received.

To those sending replies, I shall be pleased to send a reprint of the report on this topic.

W. E. ZIEGENFUSS, M. D.

Albany, Wisconsin, February 29, 1884.

Dr. V. G., of Mexico, wishes suggestions in a case of hypochondria in a man of middle age, without obvious lesion.

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ORIGINAL DEPARTMENT.

LECTURE.

THE CIRCULATION IN THE NEWLY-BORN.

BY W. S. FORBES, M. D.,

Demonstrator of Anatomy, Jefferson Medical College.

GENTLEMEN: In the new-born child, at full term, the blood is not *drawn* into the pulmonary arterial branches and into the lungs by the expansion of the lungs, as is generally believed and taught; on the contrary, it is *forced* into and through the pulmonary artery, and its right and left branches, and into the lungs, by the contraction of the right ventricle, and by the elasticity of the walls of the pulmonary arteries; while at the same moment it is prevented from going through the ductus arteriosus and into the aorta by a procedure that I now wish to point out and demonstrate to you.

In the very young *fœtus* the thorax and abdomen form one cavity, as in birds, reptiles, and fishes. The diaphragm in the *fœtus* is developed by a process of growth from the circumference to the centre, and when developed is in a passive state until birth. In the new-born child, at full term, the muscular diaphragm is called into immediate action, and in contracting performs at once a most important function in compressing the ductus arteriosus, thereby diverting the current of blood into the two branches of the pulmonary artery, which go respectively to the right and left lung. The peculiarities in the arterial system of the *fœtus* are the communication between the internal iliac arteries and the placenta by means of the umbilical arteries, and the communication between the pulmonary artery and descend-

ing part of the arch of the aorta by means of the ductus arteriosus. In the *fœtus* and up to birth, at full term, the long axis of the heart is more nearly vertical than in the adult, and the right and left branches of the pulmonary artery are, relative to the main pulmonary artery, very small, and come off from the posterior aspect of the artery, while the ductus arteriosus at this period is much larger, and is in front of the branches and nearer the sternum, and is in fact the continuation of the main pulmonary artery to the arch of the aorta, into which it opens just below the origin of the left subclavian artery, and so conducts the current of blood from the right ventricle into the arch of the aorta.

In order to show you the way in which the contraction of the muscular part of the diaphragm closes the ductus arteriosus by causing pressure upon it, I shall have to demonstrate to you the pericardium, through the fibrous wall of which sac the ductus arteriosus runs to reach the arch of the aorta.

The pericardium is a conical fibro-serous sac, in which the heart and the first part of the great blood-vessels are contained. The inner serous portion of this sac invests the outer surface of the heart everywhere, and is reflected from the heart to the inner surface of the outer fibrous portion of the sac. The base of this conical fibro-serous or pericardial sac is attached to the upper surface of the broad aponeurotic central tendon of the diaphragm. At the upper part, or towards the apex of the cone, the fibrous portion of the sac has a number of openings in it for the lodgment of the great blood-vessels which go to and come from the heart. Now this fibrous pericardial sac is composed of the same tissue as that which we find

composing the outer membrane or sheath of the great blood-vessels; and it is lost upon or continuous with the fibrous sheath of these great vessels, the largest of which is the aorta. The great vessels issuing from and going to the heart are supported in their relative positions while going through the fibrous pericardial sac, which at the same time forms tubular prolongations upon them. On the posterior aspect of the fibrous pericardial sac oblique and transverse fibrous bands are found, thus strengthening the sac and making a sort of fibrous scaffolding for the support and protection of the great cardiac vessels and the heart itself.

From the superior right and left external lateral surfaces of this pericardial sac, prolongations of the fibrous tissue continue upwards as strong bands to the inner margin of the first rib on each side of the thoracic cone, and then coalesce with the thoracic fascia described by Sir Astley Cooper in his little work on the Anatomy of the Thymus Gland. Sir Astley says: "The thoracic fascia performs three important offices: 1. It forms the upper boundary of the chest, as the diaphragm does the lower. 2. It steadily preserves the relative situations of the parts which enter and quit the thoracic opening. 3. It attaches and supports the heart in its situation through the medium of its connection with the aorta and larger vessels which are placed at its curvature." Now this thoracic fascia of Cooper is supported above by the deep cervical fascia, which is strongly attached to the transverse processes of the cervical vertebrae and to the stylo-maxillary ligament on each side of the base of the skull. We find, therefore, on each side of the body of man a continuous fibrous plane, inelastic and inextensible, reaching from the base of the skull and the upper part of the vertebral column, and extending to the cordiform appendage or central tendon of the diaphragm.

These two lateral planes thus reaching from the diaphragm to the upper part of vertebral column and to the base of the skull are, as it were, two superior crura of the diaphragm which *prevent the descent* of its central tendon when the muscular part of the diaphragm contracts in respiration.

Indeed, if the central tendon of the diaphragm, with its attachment to the base of the fibrous pericardial cone, were to descend, or if any part of the two extensive fibrous planes I have pointed out to you were to give way, what a pernicious effect such an accident would have upon the heart and great cardiac vessels! The fact is, the

entrance and the exit of the cardiac vessels through the openings of the fibrous pericardial sac hold a fixed and unvarying relation to the vertebral column. Thus the ascending vena cava enters the fibrous pericardium through the highest part of the central tendon of the diaphragm at the lower anterior aspect of the right side of the ninth dorsal vertebra; it here goes through a tendinous quadrangular opening, but receives no covering from the fibrous margin.

The descending vena cava enters the fibrous pericardium at the anterior aspect of the lower part of the right side of the fifth dorsal vertebra, and receives a fibrous prolongation from the pericardium. These openings into the fibrous pericardial sac of the two venæ cavæ do not change, nor does their relation to the vertebral column vary; they are fixed. I must remind you just here that the three layers of lumbar fascia, sheathing the quadratus lumborum and erector-spinae muscles of each side, and attached to the spines of the sacral and lumbar vertebrae and to the crest of the ilium, and to the lower border of the twelfth rib, perform the same function in keeping the lateral aspects of the base of the thoracic cone from being drawn upwards by the attachments of the muscular diaphragm, that the lateral fibrous planes or the superior crura of the diaphragm which I have demonstrated to you as being attached to the processes of the cervical vertebra and through the base of the skull, do in keeping that part of the central tendon of the diaphragm embraced by pericardium from being drawn downwards. The quadratus lumborum muscle reaching from the crest of the ilium to the twelfth rib, assists to hold, as it were, the base of the thoracic cone, while the lateral muscular planes of the diaphragm reach from this twelfth rib and the ligamentum arcuatum extend to the lateral aspect of the base of the precordial cone and thus make it tense.

We have the liver, which weighs four pounds avoirdupois, suspended from the dome of the diaphragm by means of the suspensory or falciform ligament, just beneath the right fibrous plane, which is vertical in its direction from its attachment to the cervical portion of the vertebral column and the base of the skull. This four-pound liver, the largest gland in the human body, is then really suspended from the cervical portion of the vertebral column, and from the base of the skull through the deep cervical fascia and the stylo-maxillary ligament. Along the sides of the two fibrous planes I have pointed out, we have the great cervical blood vessels lodged, as upon a

scaffolding, and in the thorax the phrenic nerves descending upon it to reach the diaphragm.

The ductus arteriosus is lodged in an elliptical opening in the fibrous scaffolding beneath the arch of the aorta. It escapes through this opening to reach the descending portion of the arch of the aorta, which is outside of the fibrous pericardial sac. This elliptical opening for the lodgment of the ductus arteriosus in its long axis extends obliquely from above, downward and forward, and to the left, going in front of the descending aorta, and above the left branch of the pulmonary artery. The tendinous fibres forming the margins of this elliptical opening embrace the ductus arteriosus, and are connected to its external coat by connective tissue.

The muscular fibres of the diaphragm contracting at the first inspiration at birth, bring together the margins of the elliptical opening in the fibrous scaffolding, and thus compress the ductus arteriosus, and eventually close it—thus changing the current of the blood from the ductus arteriosus into the right and left branches of the pulmonary artery. Especially is this compression made by the contraction of those muscular fibres of the diaphragm which ascend upon and are attached to the anterior left aspect of the pericardium, and which are so easily observed in the young child.

The alternate pressure and relaxation made on the ductus arteriosus by the contracting diaphragm, is exactly similar to the procedure we now adopt in closing by pressure the main artery in cases of aneurismal tumors, and the effect in both instances is exactly the same. When the ductus arteriosus is being compressed by the contraction of the muscular diaphragm, the right and left branches of the pulmonary artery going to the lungs are being distended and permanently enlarged until their united capacity is equal to the entire volume of blood in the main pulmonary stem, and thus the collateral circulation is eventually established with the aorta by means of the appropriate organs (the blood going through the ramifications of the pulmonary arteries, through the pulmonary capillary into the pulmonary veins, and to the left auricle, and thence into the left ventricle, and thence into the aorta). The walls of the ductus arteriosus in the meantime, being compressed, coalesce and become permanently closed. In some cases the ductus arteriosus is entirely removed by the pressure, so that not even a vestige of the fibrous cord is to be found. The contraction of the muscular diaphragm not only in this way closes the ductus arteriosus, but at the same moment holds open

the gateway, as it were, of every vessel going into and out of the fibrous pericardium. For if one stands or sits erect and straightens the vertebral column, and at the same time contracts his diaphragm, taking a long breath, he feels more comfortable, because these gateways are thus held open and the blood goes to and comes from the heart with greater facility than if they were not held open, as they are not held well open when one sits in a stooping or doubled-up posture. By instinct, as it were, we straighten ourselves when we wish to breathe easier. In the anatomist's eye, it is because the gateways of the heart are held open and tense, and the blood goes into and comes out of the heart and great arteries with greater facility, and the sides of the pericardium being drawn tight by the contracting muscular diaphragm, the heart itself is protected from lateral pressure between the expanding lungs.

The lateral muscular portions of the diaphragm in contracting usually descend, and thus the vertical diameter of the thorax on each side is extended. But they may not be permitted to descend by the stronger abdominal muscles contracting, or by tight lacing, as in the case of some women of fashion; nevertheless the muscular diaphragm, though it may not be permitted to descend, contracts on its own plane, and makes tense its *superior crura* and the *fibrous scaffolding*, and thus exerts its influence in holding open the gateways of the cardiac vessels and in protecting the heart itself from lateral-lung pressure, and thereby promotes the circulation of the blood and protects the central organ of the sanguiferous system.

The descent of the lateral portions of the diaphragm is not necessary to respiration; this is manifest from ordinary observation; but the contraction of the muscular diaphragm, though it may not be permitted to descend, is necessary in order to protect the heart from the movement of surrounding viscera, and in order to promote the free circulation of the blood through the vessels forming the cardiac roots. This statement is verified in the clinical histories of injuries of the phrenic nerve and of the diaphragm.

If one side of the muscular diaphragm does not contract on account of paralysis of the phrenic nerve of that side, then that side of the fibrous pericardial plane is not held tight; it is in a relaxed state, and the lung on that side expanding presses it against the heart.

In bilateral paralysis of the diaphragm, the heart is pushed backwards by the lungs advancing in front, while at the same time it is com-

pressed on each side: the heart's action then is always labored.

The anterior and lateral attachments of the diaphragm to the base of the thoracic cone cause the epigastrium and right and left hypochondriac region, in cases of bilateral paralysis, to become depressed. Duchene informs us that if in these cases the phrenic nerves be galvanized, the diaphragm acts again with proper strength, and during inspiration the thoracic and abdominal walls rise simultaneously, and then there is no longer a depression in the epigastrium and hypochondriac regions.

If we examine the natural history of the diaphragm, we observe that it is first found in mammals. These animals require a diaphragm to protect the central organ of circulation from the encroachment of the neighboring lungs and abdominal viscera, and by its contraction act in protecting as well as promoting the function of the heart.

In birds, and in turtles and tortoises, such an organ as the diaphragm is not required. In these animals the thoracic and abdominal viscera are in one and the same cavity, but the movement of the lungs is limited by means of pleural attachments, and the heart and its great vessels are protected by peritoneal folds which form restrictions by being attached to distant points of a rather fixed bony frame-work. In these animals the diaphragm is not found, as it is not needed.

To sum up, then, I have endeavored to demonstrate to you that—

1. That portion of the central tendon of the diaphragm embraced by the base of the pericardium is prevented from descending in inspiration by the *superior tendinous crura* of the diaphragm, which are formed by the lateral parts of the fibrous pericardium reaching on each side to be attached to the first rib and through the deep cervical fascia to the transverse processes of the cervical vertebrae, and through the stylo-maxillary ligament of either side to the base of the skull.

2. These superior tendinous crura of the diaphragm are connected together inferiorly by transverse and oblique fibrous bands, thus forming a fibrous scaffolding for the support and protection of the heart and the great cardiac vessels.

3. The opening in the fibrous scaffolding for the lodgment of the ductus arteriosus in foetal life is closed at birth by the contraction of the muscular diaphragm, and especially by those muscular fibres ascending on the fibrous pericardium from the anterior left side of the diaphragm, which muscular fibres are well developed in the newborn child.

4. That the blood at birth is *forced* into and thorough the pulmonary artery and its right and left branches and into the lungs by the contraction of the right ventricle of the heart, which at this moment has its walls as thick as those of the left ventricle, and by the elasticity of the pulmonary artery, and is not *drawn* into the pulmonary arterial branches and into the lungs by the expansion of the lungs, as has been heretofore taught.

5. The superior fibrous crura and the fibrous scaffolding between them are made tense, and their openings made patulous for the lodgment and the protection of the heart and its great vessels, and for the promotion of the circulation of the blood through them by the contraction of the muscular diaphragm.

6. The opening of the inferior vena cava, the highest point in the central tendon of the human diaphragm, holds a constant and fixed relation to the right anterior inferior border of the ninth dorsal vertebra.

7. That in the contraction of the muscular sides of the diaphragm they may be prevented from descending by the contraction of the stronger abdominal muscles acting upon the abdominal viscera. Though not permitted to descend in contracting, the muscular diaphragm still makes tense the crura.

8. The diaphragm, we may believe from its clinical as well as from its natural history, is rather an appendage to the circulatory apparatus, and not "essentially the chief agent in respiration," however much it may assist in performing that function.

COMMUNICATIONS.

LEGAL REFORM DEMANDED IN THE TREATMENT OF INEBRIATES.

BY T. O. CROTHERS, M. D.,

Superintendent Walnut Lodge, Hartford, Conn.

The following case is by no means uncommon, and points out a positive wrong, and source of danger that must be met and remedied by the teaching of physicians.

The general wholesale way in which persons arrested for intoxication are fined and imprisoned, carries conviction that this is not the true remedy, the application of which is only governed by the number of the offense.

In reality, the better judgment of courts and prison authorities condemn this means, and only

carry it out from a necessity which has no other resource.

By a strange combination of events, the penal code concerning inebriates has not changed for over two thousand years.

The teaching of the old Grecian law-giver that drunkenness could best be prevented by punishment, has been so persistently urged by moralists that it has survived all civilization and progress, and appears in modern courts of justice, a literal relic of the dark ages.

Any inquiry of prison authorities will reveal the fact that large numbers of inebriates are repeatedly being returned to prison for the same offense over and over again, growing steadily worse. Also, that a short term of imprisonment at first really destroys them, and makes recovery almost impossible, and is followed by repeated sentences for the same cause. Ninety-nine per cent. of all persons who come to jail for inebriety the first time are returned, and become incurables dating from that event.

These facts are accessible and can be proved by the records of courts and prisons all over the land.

Yet every effort to legislate on a higher plane of justice and humanity, is resisted by theological dogmas of the nature and character of inebriety.

The fear of taking away personal responsibility, and thus encouraging inebriety, by calling it a disease, has kept alive this theory of punishment with the most disastrous results to the victim.

A noted judge remarked, as long as society supports such views, the inebriate can never recover, but will be always destroyed by this means to help him.

The case which I shall present for study to support these views came into possession of a large property late in life, and the question arose as to his mental capacity to care for and will this property to others.

A very careful study was made of his past history, which was placed in my hands for a decision.

Most of the leading facts were fully confirmed by other evidence, so its accuracy was unquestioned.

H— was born and reared on a farm. His father was temperate; his mother was inclined to melancholy, and died soon after his birth of consumption.

He grew up to fifteen years without any peculiarity, except great sensitiveness to slights, and a morbid fear that he would not be considered equal to others of the same social standing.

After he passed puberty he became very proud and egotistical, and resented with violence any opposition. After an attack of anger he would be prostrated, and lie in bed a day or more.

At seventeen years of age he was violently opposed in a love match, and seemed to have suffered from a shock to his nervous system, which lasted over a year, manifest in a changed disposition and low state of health, which caused him to remain in bed from one to four days at a time. He joined a church, and became an active temperance worker, although he had not used spirits at this time.

At twenty he left the farm, having a fair academic education, and entered a manufactory. He was at this time temperate, and in good health. Five years later he married, and was in good circumstances; the only feature of his character was great pride, and scorn of low ways of living and manners.

At thirty-one years his wife died, and the firm failed, throwing him out of employment; and soon after, he began to drink to intoxication. Distinct periods of low spirits and depression came on, which always ended in a paroxysm of drinking. When this was over, he seemed more proud-spirited than ever, and more determined to win the respect of others.

At about this time he invented a machine which proved a source of wealth, and placed him in easy circumstances. From this time no event of note took place, except an irregular paroxysm of drink from two to four times a year, until he had reached forty, when one day, while drinking, he committed an aggravated assault on a stranger, and was arrested. He denied all knowledge of the event, but the court fined him heavily. The publicity of this distressed him, and he claimed to be sick for some weeks after.

Soon after, while drinking, he became violent, destroyed much property in the saloon where he procured his liquor. He was arrested and fined. From this time each drinking paroxysm was marked by some violence to persons or property, for which he was arrested, and at last sent to jail.

After this first imprisonment a total change of character took place. He was reckless, bold, and sought the lowest company; boastful, quarrelsome, drank constantly, lost personal pride, had no ambition for anything except to drink and play cards. He lost his property, and became a bar-keeper and low gambler, and was sent to jail for drunkenness and assault eighteen times in eleven years. He then became involved in a bank robbery and was kept in prison for two years.

After this he was so violent after drinking as to be considered insane, and was sent to an insane asylum. He was discharged as a drunkard, and not insane.

For the next seven years, up to the time he came under my observation, he had led a roving life as a tramp, spending all his time in station-houses, almshouses, and on the road traveling.

The same violence marked his periods of excessive drinking, only less vindictive. He was feeble in mind and body, had delusions of strength to stop at will, attributed all his misfortunes to a plot of some enemies. Was very religious at times, and full of hope; then would display a degree of petty meanness, indicating the lowest motives. He would steal at times, and show much cunning to conceal it.

Physically, he was anæmic, had cirrhotic liver and fatty heart, had a trembling, uncertain gait, complained of pain in his head and tender spots along the spine. His memory had failed. He affirmed that he could never recollect after drinking a certain amount of spirits. He gave up the use of all strong liquors except beer and bitters, and insisted that he had reformed.

The question was on his mental capacity to care for, and dispose of property. He had been living quietly and regularly in a good home when I was called, and was greatly improved in general health. Two physicians had given an opinion that he was fully sane, and capable of managing his property.

To this I totally dissented, for the following reasons:

1. He had evidently inherited a degenerate nervous organization, which developed into inebriety from the mental shock at the loss of his wife.

2. This was further strengthened by the destructive or violent delirium which accompanied each attack of drinking.

3. The repeated imprisonment for these offences increased the mental degeneration, still farther developing all the conditions of chronic inebriety, and soon in a total change of character and habits of living.

4. The integrity of the brain was permanently impaired by the various circumstances of life. His delusions of strength to stop at will, and of persecution, as well as religious paroxysms and other minor phases, was evidence of this.

The history of a trance state, in his loss of memory at these violent periods, was also distinct in his senseless assaults and unusual acts.

My opinion was not adopted, and in two months

after coming into possession of his property, he opened a grand saloon in an obscure country village, and imported a large amount of choice wine.

After drinking to intoxication, he destroyed most of the gilded fixtures, seemingly as a matter of pleasure. Finally, his property was put in the hands of trustees, and incipient paralysis has already appeared.

This case was largely the result of dangerous penal methods of treatment. His first imprisonment increased the very disorder it was designed to relieve. He was made more hopeless and incapable of rising above his diseased impulses, by the prison treatment. The state actually educated and forced him into the lowest stage of degeneration.

Pecuniarily the problem is a startling one. It cost the tax-payers to take care of him in jail not less than three thousand dollars, with no result but to make him worse.

Had his malady been fully recognized at first, and he been committed to a workhouse hospital for this class, recovery would have most naturally followed. In such a place the mind and body would have been built up, and he would have been fitted to take place as a producer in society, and not unfitted and made more incompetent to go back into healthy society and living. Hundreds of cases are thrown into prison on the general principle that the shame of this punishment and the suffering which comes from it will deter them from drinking again, the result of which is to crush out the very element upon which recovery depends. All that the prison can do for the inebriate is to remove him from alcohol; what it fails to do, is to build up the weakened brain and nervous system. Prison diet and hygienic surroundings can never restore the weakened organism. The psychical influence of prisons leave an impress that can never be estimated.

The bad associations, the wounded pride and ambition, and the crushing out of that unknown element which gives tone and vigor to the organism, and sustains it in the hour of peril, are all factors whose effects can be fully realized.

A great reform is demanded in the penal treatment of inebriates, and the public look to the medical profession for help and guidance.

To send all cases to jail is obviously as great an error as it would be to amputate all cases of fracture of the lower extremities.

These cases must come under medical care and study, and should be quarantined in hospitals by themselves, and special appliances hunted out for each one.

It is a scientific problem, as well as social and pecuniary, and its solution is demanded from all sides.

The facts upon which it rests are within the range of every medical man, and the time has come for change and reform.

THE UNKNOWN FACTOR IN THE EQUATION OF THE NERVOUS SYSTEM.

BY J. M^YF. GASTON, M. D.,
Atlanta, Georgia.

The Action of Medicine on the Cure of Diseases.

This is a question of different import from that of the action of medicines in the cure of diseases, which implies an investigation of the rationale of medication, and its proper effect upon the disorders of the organism; and thus being in its character essentially physiological and pathological, it is not directly involved in the results of clinical observation. The aim and end of the proposition which is here submitted for consideration, is understood to be a systematic analysis of the facts which are developed in connection with the influence of medicinal agents upon the human system.

If the most enlarged scope of inquiry be allowed in this field, the question may be opened as respects the salutary result from the resort to medication in any case, and the propriety of abstaining from the use of medicine.

As this point should be put at rest before proceeding any further with the definition of our subject, it may be proper to set aside all skepticism in regard to the sum total of good or evil that results from the indiscriminate or even injudicious employment of medicine, and eliminate all guessing from the proofs of medicinal effects upon the system.

While it is well-established by recent statistical records, that many acute diseases run their course favorably without medication, and that we may reasonably depend upon the *vis medicatrix nature* in some cases, yet the salutary influence of medicine upon the majority of diseases is clearly demonstrated by the practical results in the daily experience of physicians. There may be instances of sickness for which medicine is not indicated, but our concern is about those cases for which it is requisite; and the object of our inquiry respecting "the action of medicine on the cure of diseases," is to determine the mode in which it may be employed to the best advantage. "Medicine is any substance, liquid or solid, that has the property of curing or mitigating disease," and

our investigation pertains to the most efficacious means of cure. It is no part of my undertaking to solve the intricate problem of the quality of the various medicinal agents, nor to decide upon the relative effects of the different classes of remedies. Accepting the great cardinal distinction of drugs, according to their special influence upon the animal economy, I propose to delineate from the observations made by others, and from my personal experience, the characteristic effects of medication upon the human organization.

The influence of subcutaneous and other medicated injections upon the vital functions, illustrates strikingly "the action of medicine on the cure of diseases," and I trust that this phase of medicinal influence may be recognized as being completely within the sphere of inquiry submitted in this proposition.

As the nutriment of the body is introduced through the stomach, it might be naturally inferred that the general system should be also medicated by the same channel. The fact, however, must be taken into consideration, that the food undergoes various changes in the process of digestion and assimilation, which are not requisite for the effects of medicine upon the organism. The influence of most medicinal agents is to some extent impaired by the action of the gastric juice, and by admixture with the alimentary substances in the stomach. In view of this complication, a direct route to the sanguiferous and nervous systems, by the immediate absorption of medicine, has been found more certain in manifesting its appropriate therapeutic effect. This is seen in the *immediate influence of the medicine upon the nerve fibres* when injected into the areolar or cellular tissue.

The circuitous route through the entire system of veins and arteries, is not at least requisite to produce the effect of those medicinal agents directed especially to the nervous development.

Facts do not sustain the doctrine inculcated by Headland, that medicinal agents must enter the circulation and take the rounds of the blood, before their effects can be exhibited upon the animal economy. I appeal to all who have witnessed the almost instantaneous influence of anodyne injections into the areolar tissue, to correct this view of the action of medicines, when used by the hypodermic process, or when injected into serous or mucous cavities. Being impressed with the insufficiency of the experiments, and the faultiness of the reasoning, by which his proposition is claimed to be sustained, I have to draw attention to a few points that show this weakness.

The inference drawn from the experiment that it takes only 65.76 seconds for any substance to pass round the entire circulation, and that hence all medicinal agents may reach the nerve-centres within this period through the blood, does not follow as a necessary consequence; since the appropriation of the active principle of the medicine demands other conditions that are not complied with in the given cases, and there is a more rational and satisfactory explanation.

Neither does the experimental proof, afforded by division of all the nerves of a part, without impeding the circulation of the blood, avail anything; as the blood reaches the nerve-centres, and this eventually produces the effect of the medicine upon the nervous system. The case adduced of the continuity of a nerve, without the supply of blood, proves nothing; as the life of the nerve ceases with the obstruction of its necessary nourishment by the circulation, and therefore the contact of any medicinal agent with a dead nerve cannot give any result. Another fallacy consists in claiming for such cases as manifest influence through the nerves, that the proper action is on the centre, and that the nerve-centre produces the effect, and not the agent. This is simply absurd, and does not demand serious refutation.

I presume that all are of the opinion that the nerve-centres are essential to the propagation of any impression through the nervous system; yet it is none the less true that such impression is received through a nervous connection, and *that this impression depends upon the intimate relation of the minute nerve-fibrils to the capillary blood-vessels, upon which the primary impression is made by the absorption of the active agent.*

There is no doubt in regard to the general principle, that medicinal agents enter the general circulation, and produce their effects upon the different secretory organs by actual contact with their texture. Yet, granting this proposition in its widest acceptation, we have numerous instances that are not to be accounted for by such a long circuit in the development of the effect. If it can be demonstrated in any instance, that an influence operates upon the vital organs from peripheral impressions, without absorption into the general circulation, it is evident that such results from the contact of medicinal agents may be uniformly anticipated.

All the class of revulsive, including the sudden action of extreme heat and cold upon circumscribed portions of the cutaneous surface, are held to be exceptional cases; and their influence must be explained upon the reflex principle of

the nervous system. Yet, if such impressions are extended without any shadow of claim that absorption has anything to do with the effect, then it is fair to infer that the first influence of an agent may be manifested directly upon the minute fibres of the nerves, and that the influence may be propagated thence to the nerve-centre, and extended through this to the entire organization. Note, for example, the effect of strong hartshorn when confined in contact with the skin, where no absorption can occur through the unbroken cuticle; and yet its energy is seen and felt like that of boiling water upon the surface. It is not merely a mechanical influence, nor yet chemical, but clearly vital, and must depend upon the rapid extension of the primary impression, through the nerves to the nerve-centre, which is returned with energy to the tissues of the surface, and with a special modifying power to the entire organization. By no other link of association can this result be explained, than through the reciprocal action and reaction of the different elements of the nervous system. While it is clear that the circulation of the blood in the capillaries is a prerequisite to any manifestation of nervous power, no causative influence can be attributed to its passage through the veins and arteries from and to the surface upon which the impression is made by the agent.

If then the contact of any substance with the superficial nerve fibres produces an impression that may be transmitted to the internal organs, and which by a reactionary power of the nerve-centres is extended throughout the system, we are prepared to appreciate the mode in which the subcutaneous impressions of medicines upon the capillaries affect the minute nerve-fibres primarily, and are extended consequently to the general system.

From an early period in medical history, isolated facts have been presented to illustrate the rapid influence of agents introduced beneath the skin; and more recently medicinal substances were inserted under the cuticle with a view to secure certain local or general effects, but without any correct appreciation of the principle upon which hypodermic applications have since been used so successfully.

While others had previously resorted to one or another form of medication through the skin, it was only in the year 1854 that Dr. Alexander Wood, of Edinburgh, initiated the method of subcutaneous injections for the relief of pain and the cure of diseases. The discovery of the vasomotor system of nerves by Dr. Brown-Sequard, a

few years previously, gave a plausible clue to the efficacy of this method of treatment; yet for a considerable time it did not receive a large share of consideration from theorists, nor was it adopted very generally by practitioners until within the past fifteen years. At the outset, the use of the hypodermic syringe was limited to a certain class of cases in which pain was the predominant element; but latterly it has been employed for the introduction of a variety of medicated solutions; and the observation of its advantages has led to its use in an extended field of diseases. It has been ascertained that in the application of means for the relief of physical disorders, we may operate from without inward in many cases, with a prospect of securing better results than can be anticipated by directing our remedies from within outward. This is the case, especially, when our measures are addressed to the peripheral distribution of the nerves. The centripetal influence of the medication being first effected, there ensues promptly a centrifugal development of the effect, which extends to all parts of the body.

(To be continued.)

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE UNIVERSITY OF PENNSYLVANIA.

BY D. HAYES AGNEW, M. D., LL. D.,

Professor of Surgery and Clinical Surgery in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

Vesical Calculus—Crushing by Bigelow's Operation.

GENTLEMEN: The first case which I shall show you is one of stone in the bladder, and while the patient is being etherized, I shall make a few remarks in reference to this subject.

Stone in the bladder is distributed universally over the globe. I do not know that there is any locality in which it is not encountered, but there are some regions in which it is more common than in others. In the New England States, and in North and South Carolina, Illinois, Texas and Louisiana, it is rather an uncommon affection; but in Kentucky, Ohio, Tennessee, Alabama, and Missouri, it is frequently met with. When we cross into continental and other countries, the same difference is found. Stone in the bladder is more common in the southern part of France than it is in the northern part. In England, a large proportion of the cases of this disease is found in the counties of Norfolk and Suffolk; and in the northern counties of Ireland and Scotland stone is more common than in the southern parts of the same countries. Its unusual prevalence in some of these districts is attributed to the fact that the people drink a great deal of cider. Whether or not this exerts any influence, I think is questionable. In India, it is

in the northern part that the greater number of cases occur. In China, the greater number of cases are found within a radius of forty or fifty miles around Canton. The prolific cause of vesical calculus is generally due to some defect in the organs of digestion and assimilation.

Stone may form in two different parts of the body, either in the kidney or in the bladder. Stones composed of uric acid or oxalate of lime, usually commence in the kidney. In consequence of the aggregation of a few crystals of one or other of these compounds, a concretion is formed in the infundibulum. This passes into the pelvis of the kidney, and thence into the ureter. Its size is perhaps disproportionate to the calibre of the ureter, so that it becomes arrested and is detained in its passage toward the bladder. This gives rise to an attack of renal colic. After a time, the pressure of the stream of water behind, and the gradual yielding of the muscular coat of the ureter, allow the stone to pass until it slips into the bladder, and the pain suddenly ceases. Fortunately, in many cases, the concretion is discharged after entering the bladder, and this is the end of all trouble. Sometimes other attacks may follow, but often there is but one attack, and the patient is permanently relieved. If, perchance, in consequence of its catching in some of the folds of the bladder, or if the bladder is somewhat sacculated, or has a deep *bas-fond* resulting from prostatic trouble, it does not immediately pass out, it gradually grows by deposit, until it forms a large mass which we call a vesical calculus.

When stone begins in the bladder it is usually of the phosphatic variety, and generally results from some disease of the lining membrane, or from prostatic obstruction. Under such circumstances products are formed which, acting on the urine, cause a deposition of its salts and the formation of deposits, which gradually grow until they become large enough to give rise to symptoms. Sometimes a stone is due to obstruction of the urethra. A stricture, especially in old persons, predisposes to the formation of stone, simply because the urine is not completely evacuated from the bladder, and the residual urine serves to produce a deposit, which may become the nucleus of a stone.

Stones which form in the kidney usually have a laminated character, and with a nucleus in the centre. It does not follow, because a stone begins as an uric acid or oxalate of lime calculus, that the whole stone will be made up of these compounds. Instead of this, there may be different strata, one layer being composed of uric acid, another of oxalate of lime, and another of phosphates. The character of the stone depends upon the chemical composition of the urine. Phosphatic stones are often only a conglomerate like dry mortar, rendered adherent by tenacious mucus.

In reference to the symptoms, the first thing noticed by this patient was the desire to pass water more frequently than had been his custom, compelling him to rise during the night two or three times. This frequency continued to increase until he was obliged to pass urine almost every hour. In addition to this, the dislodgment of the urine from the bladder was accompanied with pain which he locates at a certain point. It is not in

the bladder, but at the end of the urethra. The pain is not felt before or during the passage of the urine, but just at the termination of the act. This pain on urination is a very important point in diagnosis. It is suggestive of stone in the bladder, because we find under such circumstances (not always, but very generally), pain of this character. Pain is felt at the completion of the act of urination, because when the bladder is empty, the sensitive walls of the organ contract on the irregular surface of the stone, causing pain. It is felt at the end of the penis, because we always refer irritation of a nerve to the peripheral distribution of the nerve, and not to the point where the irritant acts. In addition to pains and frequent urination, the water contains mucus, pus and some blood, the stream being often suddenly interrupted by the concretion rolling into the neck of the bladder.

The treatment of these concretions may be divided into the medical and the surgical. The medical treatment is simply palliative. At one time the profession were largely engaged in experiments looking to the solution of stones. These have signally failed. There is, however, no doubt that in the case of stones composed of phosphates or urates, the irregular surfaces may be smoothed off and the calculi rendered less irritating by the use of alkalies, as bicarbonate of sodium. Some of the German waters have from this circumstance obtained considerable popularity in alleviating the sufferings from stone.

The only way to cure stone in the bladder, is to remove it. There are two ways of accomplishing this result. One is to introduce an instrument, grasp the stone, and crush it; the other is by the cutting operation, the incision being made either through the perineum, or above the pubes, called the high or supra-pubic operation. The crushing process is done with an instrument called a lithotrite, which was devised a long time ago, in a rude form, by Gruithuisen, a Bavarian surgeon, but which was much improved by Civiale, and particularly by Mr. Weiss, of London, and by Sir Henry Thompson. It consists of two blades, a male and a female blade. The instrument is passed into the bladder, the blades separated, and the stone caught. Then, by means of a screw, the stone is crushed. The smaller fragments are next picked up and crushed, until the stone is reduced into particles so small as to readily pass through the urethra. The old plan was to break the stone and allow the patient to pass the fragments through the urethra. Under these circumstances a fragment would often become entangled in the bladder or urethra, giving rise to a great deal of pain, and frequently leading to the formation of another stone.

The operation which has of late very largely filled the mind of the profession, is that which is known as the Bigelow operation, or litholopaxy. This consists in crushing the stone at one sitting, into fragments so small that they may be removed with an evacuator. The evacuator is not a novelty, for it is by no means a new instrument. The novelty consists in the prolonged operation, the crushing being continued until the stone is broken into sufficiently small fragments, even if this should require an hour or longer, and in the improved character of the evacuator. The opera-

tion is still on trial. So far, it is viewed with favor by the profession. I have performed it a number of times, and am pleased with the results, but I am not yet prepared to say how it will compare with other operations, at least until a sufficient number of cases have been recorded to make a comparison valuable.

What I propose to do to-day is to introduce this lithotrite, catch the stone, and if it is soft enough and not too large, crush it and remove the fragments with this evacuator, which consists of a gum bag which is filled with tepid water. At the bottom is a glass receiver into which the sediment drops. The bag has also a nozzle which connects with a large catheter, after the latter has been introduced into the bladder. The bulb being compressed, the water is forced into the bladder, and when the pressure is removed it returns, bringing with it the fragments of stone, which fall into the receiver. This washing-out process is continued until all the debris has been removed.

The conditions which warrant the introduction of a lithotrite for crushing stone and the removal of the fragments with the evacuator, are a sound urethra, and a stone not too large nor too hard.

Some preparation is usually necessary before an operation of this kind is resorted to. The urine should, of course, be examined to determine the presence or absence of kidney disease, which must exert a determining influence on the operative procedures proper to be adopted. The patient should be kept quiet for a few days before the operation, and the bowels should be opened early in the morning of the day of operation.

This operation is not suited to cases of stone in children, and a large proportion of the cases of vesical calculus occur before the age of twenty years. In children, the cutting operation is the proper one.

Before commencing the operation, I pass a sound into the bladder to see if I detect the stone. This is very important, and should always be done. It is deemed of such vital importance that, although the surgeon may have felt the stone a dozen times before, but does not feel it at the time of operation, he does not cut. You may think that this is unnecessary caution or precaution, but that it is a wise rule, there is no doubt; for on several occasions the bladder has been opened with the expectation of finding a stone, and no calculus has existed, although at previous examinations the operator thought that he had detected it. Placing this deal-board on the end of the sound, I think that the clink of the instrument against the calculus can be heard over the entire room. There is, therefore, no question in this case as to the presence of a calculus.

We bring the patient across the bed and throw into the bladder about four ounces of flaxseed tea. We must then wait and see if the bladder will retain it. The patient is not yet thoroughly under the influence of the ether, and it seems to me that the bladder is about the last part to yield to an anæsthetic. The object of throwing fluid into the bladder is to so distend the walls of the viscus, that in manipulating the instrument it will not come in contact with the mucous membrane, and thus prevent the wall of the bladder being caught between the blades of the instrument. If too

much fluid is thrown in, it will provoke resistance and be expelled. The patient is not yet fully relaxed, and the stiffness of the knees reminds me of a little incident which occurred in a case which I was cutting for stone, in Delaware about a year ago. The patient was placed on the table preparatory to operating, and notwithstanding the profound anesthesia, the knees could not be bent. On examining the joints, I found false ankylosis on both sides. The adhesions were broken up, and I then proceeded with the operation. In cases in which relaxation does not occur, it would be well to examine and see if a trouble of this nature existed.

I now introduce the lithrotrite, and at once catch the stone. As soon as I secure the concretion, I draw the instrument away and raise it up a little so as to place it clear of the mucous membrane. Having crushed the stone, I pick up the different fragments. After once catching the stone, it is, as a rule, not difficult to catch the fragments, because they all fall to one place. I continue this until the calculus is pretty well reduced.

I next remove the lithrotrite and insert a large catheter, and attach the rubber bag. A portion of the liquid is then slowly forced into the bladder, and as it returns it brings with it some of the debris resulting from the crushing of the stone. This you can see falling into the glass receptacle. It is necessary to let a few minutes intervene between the injections, so as to allow any fragments which may be floating in the liquid to settle into the receiver; for if they were forced back into the bladder, their sharp edges coming in contact with the mucous membrane might cause injury.

A large quantity of debris has now been removed. I shall withdraw the catheter and pass a sound, to see if I can detect any fragments. I can feel none.

The after-treatment will consist in the administration of a suppository of opium, the application of a large poultice over the epigastric region, and perfect quiet. He will be placed on a liquid diet, consisting largely of milk. He will be allowed to drink flaxseed tea, or what answers very well, water containing a small amount of bicarbonate of sodium. Before he leaves the hospital, a sound will again be passed to see if any fragments have been left behind.

CLINICAL NOTES.

BY W. F. COOMES, M. D.

Professor of Physiology and Diseases of the Eye, Ear, Throat, and Nose, in the Kentucky School of Medicine at Louisville, Ky.

Case 1. Master F., aged nine years, was brought to me in the latter part of December, 1883, by his father, who informed me that the little fellow had a pin in his throat, and at the same time said: "Doctor, you will have little trouble in removing it, for the head of the pin is pushing out against the skin."

I paid but little attention to what the man said about the matter, as I thought that he was mistaken about the locality of the pin, and proceeded to examine the larynx with the laryngoscope. This I found very difficult, as the throat had been

manipulated by another physician and by the child's mother, and in consequence of that fact was extremely sensitive and bleeding; but nevertheless I succeeded in getting a moderately fair look at the larynx and its surrounding structures, and could not see the pin.

I then examined the outer surface of the neck at the point indicated by the father, which was near the median line, and a little to the left, and just below the inferior margin of the thyroid and cricoid cartilages.

It was impossible to determine whether the protruding portion was the head or point of the pin, as it was covered by the skin and deep fascia.

The pin moved up and down with each act of deglutition, but did not change its relations with the larynx, showing that it was very firmly fixed.

Being unable to determine whether or not the head or the point of the pin was projecting, it was impossible to say just what means would have to be resorted to in order to remove it.

Under these circumstances, I prepared to do tracheotomy, or whatever might be necessary to remove the pin. I determined, however, not to give an anesthetic until I found that it was absolutely necessary. My little patient, who was quite a soldier, promised me to hold still while I made an incision through the skin and fascia. This he did, and, to my gratification, when I cut through those structures, the head of the pin presented itself. It was firm and fast, and required quite a stout pull with a strong needle-holder to remove it. Indeed, it was necessary to press the larynx backwards and keep it in position with my left hand, while I did the pulling with the right. The pin was so firmly grasped by the tissues that it was considerably bent in pulling it out. Its removal caused but slight pain, and the little wound was closed with a piece of adhesive plaster. There was not a bad symptom following the operation, and the boy attended school as usual after the fourth or fifth day had passed.

The puzzling question is: How did the pin make its way through the tissues as above stated?

Poisoning from Local Application of Iodoform to an Ulcerated Larynx.

Case 2. Dr. S., aged 24, subject of laryngeal phthisis, consulted me in August, 1883. At that time there was considerable ulceration of the epiglottis, with more or less congestion of all the structures surrounding the larynx. There was much pain accompanying the act of deglutition, and in order to alleviate this, iodoform was blown into the larynx once in twenty-four hours. During the time that I made the applications, about two grains was used at each sitting. When the doctor ceased to visit my office, he made the application himself, and used about one grain; applying that with a small insufflator. There were no ill-effects from the drug until after it had been used about thirty days. One evening, about 8 o'clock, the application was made as usual, and in about an hour and a half the pulse became irregular, frequently losing a beat or two. At times the heart's action became much accelerated, and made the patient very uncomfortable. It again became slow and intermittent. Along with this irregular action of the heart, there was a sense of extreme fulness about the stomach, as if

that viscus was distended with gas. There was also a fainty feeling, with a sense of oppression about the heart and lungs.

These unpleasant symptoms lasted about two hours, leaving the patient with an irregular heart, and somewhat exhausted. The application was repeated time and again, with the same result in each instance, thus leaving no doubt about the unpleasant symptoms being due to the action of iodoform.

I must confess that I was surprised when the doctor told me of his experience with the drug; and I would have been loth to believe it, had it not come from one whom I know to be fully competent to judge of its effects. Previous to this occurrence, I was of the opinion that it would be impossible to poison a person by applying so small a quantity of iodoform locally; as we have been told by those who use it extensively, that large wounds could be filled with it, and that there was but little danger of poisoning.

Of course, it is known that poisoning from this drug is liable to occur, when it is applied to open wounds; but it is understood that bad results from such practice are of rare occurrence, and the majority of surgeons apply it without hesitation.

It must be understood that in this instance the open surface was being constantly increased; and this may account for the fact that the patient was not poisoned from the first applications. I am positive that the amount applied by the doctor himself did not exceed one grain, for I had him to measure out what he supposed to be equivalent to the amount applied at each sitting, and found it to be just barely one grain. I report this case simply because the poisoning resulted from so small a quantity of the drug; and in order that others might profit by the experience.

Case 3. J. D. F. R., aged fifty-six years, was brought to me by Dr. Morris, of Elizabethtown, Ky., about August 20, 1880.

The patient was much emaciated, and his general health anything but good. He slept badly, and had an anxious expression about his face. He had a severe cough, which was worse at night and in the morning, and altogether the patient looked very much like an individual suffering with pulmonary phthisis. His vocal cords were examined, but presented nothing more than slight congestion. His lungs were examined by Dr. F. C. Wilson, who was unable to detect anything wrong with them. He was sent home with instructions to have a good diet, with tonics.

I heard no more from the patient for several months, when I received a letter from Dr. Morris, containing a small hickory splinter, a little less than one line in width, and about one inch and a quarter in length. This was expectorated by the patient while in a fit of coughing. This was the cause of the three years' distress; and when it was expectorated, the patient remembered the time of its introduction to have been on a certain evening while he was engaged at work in an axe-handle factory.

He thought the severe cough which occurred at the time that the splinter was introduced, was caused by a great effort that he was making to lift a heavy piece of timber, not dreaming that the piece of wood had passed into his trachea. At the time of the accident, the patient came near

suffocating from the effects of prolonged cough, which lasted for hours, and to use his own expression "the cough was killing."

It is needless to say that the removal of the splinter brought relief, and Mr. R.'s cough ceased, and he has since enjoyed good health.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

The Bacillus Tuberculosis and the Etiology of Tuberculosis. Is Consumption Contagious!

Second Communication.

[Read November 14, 1883.]

BY H. F. FORMAD, B. M., M. D.,

Lecturer on Experimental Pathology and Demonstrator of Morbid Anatomy in the University of Pennsylvania;
Mütter Lecturer in the College of Physicians of Philadelphia.

GENERAL CONSIDERATION.

A little over a year ago* I had the honor of presenting for your consideration some anatomical points in refutation of the etiological relations of the bacillus tuberculosis.

At that time I announced some original observations regarding the histology of scrofulous tissue, tending to place the question of heredity in tuberculous disease upon an anatomical basis. These peculiarities of scrofulous tissues, I submitted as elucidating the etiology of tuberculosis, showing that the peculiar etiological condition of the individual, under the influence of simple irritants, and not the character of the irritant, is responsible for tubercular inflammation. It gives me pleasure to state that these observations have since been confirmed by several competent histologists, whose articles on this subject will soon appear in print; besides which, a general interest has been manifested by favorable comments both in America and abroad.

Shortly before the publication of these observations, Koch, of Berlin, had brought forward the discovery of the now famous bacillus tuberculosis, affirming it to be the sole cause of pulmonary phthisis, and other forms of tubercular disease, and claiming for it, besides exclusive pathogenetic properties, special morphological and chemical characteristics.

In my first paper, I denied some of these propositions upon grounds of personal investigation, and, subsequently, Koch's researches were also severely criticised by a number of other observers.

As interesting and valuable as the discovery of Koch is, from a biological standpoint, its practical value is, in my opinion, decidedly over-estimated, and has not nearly the significance for medical science which the enthusiastic followers of Koch ascribe to it. The influence of the discovery was, however, great in strengthening the traditional and unwarranted belief in the contagiousness of phthisis, as held by a small part of the profession

*Studies from the Pathological Laboratory of the University of Pennsylvania, xi.: "The Bacillus Tuberculosis and some Anatomical Points which suggest the Refutation of its Etiological Relation with Tuberculosis, by H. F. Formad." Read before this Society, October 18, 1882.

and community. On the other hand, this belief led to the popularity of the discovery. In this respect, the bacillus theory has perhaps been harmful, and, taking the consequences into consideration, we should not accept such a theory without the closest scrutiny.

Two practical benefits may accrue from this discovery. The first is that the fear of the effects of the bacillus may induce greater cleanliness in hospital management, and enforce improvement in hygienic matters in general. It is doubtful whether the removal and prompt destruction of the sputum would have any influence in checking the spread of phthisis, as the disease is found as often, if not oftener, in the clean palaces of the wealthy as in the unclean huts of the poor. The second benefit resulting from the bacillus theory may be that physicians may become induced to make more use of the microscope in diagnosis; yet, in this respect, the general use of the microscope is hardly practicable on account of the thorough technic and experience required.

To-day, while the bacillus is acknowledged as a common morphological concomitant of tubercle, the pathogenetic properties are denied it by the best pathologists and clinicians, on account of a want of sufficient confirmation of the evidence thus far offered.

The followers of Koch's theory are, however, numerous, but they are recruited largely from the ranks of clinical teachers, book-writers, and others possessing no opportunities for personal investigation.

It may be well to state that, upon my visit to Koch last summer, made with the purpose of doing justice to this important question, I was gratified in many respects. I found Koch an earnest and conscientious worker, and not as dogmatic and extreme in his views as would appear from his writings; nor is he as self-satisfied and as rash to jump at conclusions as are some of his followers. Koch has the co-operation of an excellent staff of assistants, all able mycologists; but it was a matter of surprise to me that there was not a single competent pathologist connected with Koch's laboratory; and such services are evidently much needed to give to the observations made there the proper interpretation from a biological and anatomical standpoint. I was also pleased to learn in Berlin that the discovery of the bacillus was exaggerated, not so much by Koch himself as by the Imperial Board of Health, which employs him, and by his over-zealous followers in the profession. There is strong evidence, however, that Koch's investigations are biased by the determination to find for each specific disease a specific fungus.

Following out the various phases in the study of tuberculosis, I am sorry to see that the entire subject is now being considered from a purely etiological basis with reference to bacteria, while the study of the anatomical and biological relations is wholly neglected.

I admire the beautiful bacteridian discoveries of Klebs, and particularly those of Koch, in connection with the etiology of tuberculosis. The accomplishment of these results is a triumph for mycology and scientific botany; but these studies are much too one-sided to have an application to scientific medicine. The bacillus is there! It is concomi-

tant with most tubercular lesions. It is diagnostic of tuberculous change. It is, on account of its irritant properties, one of the causes of tuberculosis; but this forms no reason for asserting that tuberculosis should be considered a contagious disease, without further investigation and proof. A contagious disease can have only one cause. I cannot agree with those who define the predisposition to phthisis as being a condition of the organism which offers a favorable soil for the tubercle bacillus. Nor can I believe that inheritance is explained by subsequent infection from cohabitation; *e. g.*, that children become scrofulous by living with consumptive parents.

The latest fruits of the bacillus studies have even inspired Baumgarten (*Centralblatt f. d. Med. Wis.*, Aug. 4, 1883,) and several others to come to the conclusion, in reference to the hereditary nature of tuberculosis, that the bacillus is transmitted in its larval state from mother to foetus in intra-uterine life! One would think, however, that one of the most wonderful effects of the tubercle bacillus is manifested by the change it produced in the direction of reasoning of some of our pathological and clinical investigators, both at home and abroad.

Some of the younger pathologists are even affected by a regular fanaticism for bacterian studies in tuberculosis. These studies now take the place of their former excellent pathologico-anatomical studies. Consideration is no longer given to the tissue changes, or the nidus which invites the bacteria and nourishes them. In fact, Koch's followers in their enthusiasm exaggerate matters, and, to Koch's own amusement, go further in their bacillus speculations than he himself thinks justifiable. It is really painful to read how some of the younger German pathologists, and a few of the prominent English surgeons, under the influence of the bacillus craze, will make, in their publications, assertions entirely unwarrantable. They describe, for instance, with the greatest ingenuity and exquisite minuteness, how "one or more bacilli" will produce certain histological changes in the lungs or in the peritoneum, designating the exact route to the same; how the different cells, the lymphatic and the blood-vessels, are affected; how the bacilli convert one variety of cells into another; how they manufacture giant cells and cheesy material; how acute and chronic phthisis is produced by the bacilli, and the quantity necessary for each; how tubercles develop only and exactly in those places where the bacillus becomes lodged; how, if bacilli alone are inhaled, miliary tubercles form; and how, if the bacillus is accompanied by some other irritants, a broncho-pneumonia will ensue.

All the above statements are made by scientific medical men and pathologists, and offered as broad facts, in full earnest! I only have to say that here evidently observation is substituted by imagination and speculation; and all this is done for the sake of the convenience in explaining a disease by pretty hypotheses.

The only men who attempted to repeat Koch's experiments, besides the work done in the pathological laboratory of the University of Pennsylvania, were Spina (*Studien über Tuberculose* Wien, 1883,) and Watson Cheyne. Of the latter

two scientists, Spina came to results entirely different from those of Koch, and they disprove beyond doubt some parts of Koch's hypothesis. From an analytical and critical point of view, Spina's studies of tuberculosis are excellent, but the technical part of his investigation is deficient, and hence not satisfactory. Watson Cheyne, to whom the "British Association for Advancement of Science by Research" had entrusted the investigation of tuberculosis, and the testing of Koch's researches, did not do justice to his mission. From Cheyne's report (*The Practitioner*, April, 1883), it is seen that he made no earnest attempt to study the nature of tuberculosis, because all he did was to study and experiment with bacteria met with in tuberculous lesions. He went to see some of the different mycologists, consulting only believers in the germ theory; obtained some French and German bacteridian material, and, after testing the same, he reports with great emphasis that Koch's bacilli are a more genuine tubercular virus than Klebs' or Toussaint's micrococci. He did not inquire, nor did he care, whether tuberculosis may have any other cause! He simply imitated some of Koch's experiments with the bacillus material in rabbits and guinea-pigs (only), and obtained, of course, the same results. Furthermore, he made some control experiments, which, as I will show, pass for naught, as they are much more deficient than those of Koch.

There are a number of excellent studies in reference to the occurrence of bacilli in the sputum and in tuberculous tissues; but the main part of Koch's hypothesis, *i. e.*, the etiological relation of these bacilli to the tubercular disease, remains still unconfirmed.

My own researches on tuberculosis were made from a standpoint different from that of Koch, and they were undertaken five years ago, being carried on continuously since that time by myself and assistants. My object was to investigate the natural history of the disease, without being influenced by any preconceived views. While due attention was paid to external agencies in the production of tuberculosis, the part played by the animal or human organism itself, the behavior of its component cells, and the primary changes in the tissues, were not lost sight of.

I may state that I was fortunate enough to be able to utilize the material of over four hundred cases of tubercular disease from the autopsy table, including a number of cases studied in the pathological institutes in Europe at various times.

My present research on tuberculosis with special reference to the bacillus question, was carried on during the last year and a half, under the auspices of the Provost of the University of Pennsylvania, Dr. Wm. Pepper. This communication should not be considered a report on my investigations, as these are not yet concluded; but a detailed report of these investigations will be made next summer. Some of the positive results achieved will, however, be referred to in the present paper; otherwise it merely embodies a general critical survey of the question of the etiology of tuberculosis, based upon a careful perusal of the literature of the subject and upon personal observation.

I may state at the outset, that, while the results of my observations force me to-day to make

some concessions to Koch, namely, that his bacillus, on account of its irritative properties, can produce tuberculosis under certain conditions, I am firmer than ever in my former conclusions from the results of repeated observations, that tuberculosis may arise from other causes. The bacillus may be one of the causes, conditionally, but it is not the cause. The question of predisposition stands in the way of the acceptance of the bacillus theory. Furthermore, I will try to show that tuberculosis is not a contagious disease, and it is particularly in reference to this that I am glad to bring the present subject before the Society, desiring to profit by the discussion which is to follow as a result of the experience and the clinical observation of the individual members of the Society.

The question of the contagiousness of phthisis is one of supreme importance, not only from its scientific, but also from its social aspects.

For convenience in treating the subject of the etiology of tuberculosis, I shall speak of it under the following headings:

1. The definition, the anatomical character, and the etiology of tubercular lesions, including pulmonary phthisis.
2. The predisposition; the predisposing conditions; scrofulosis.
3. Tuberculosis without predisposition due to inflammation of serous membranes.
4. Question of contagiousness; clinical aspect.
5. The bacillus tuberculosis.
6. Experiments—"pro" and "contra;" traumatic tuberculosis.

Conclusions.

All these considerations will have to be, of necessity, very brief.

1. The Definition, the Anatomical Character, and the Etiology of Tubercular Lesions, Including Pulmonary Phthisis.

No definite understanding concerning a disease can be arrived at unless some fixed conception of the anatomical characters and various expressions of the lesions of that disease is formed. Thus, as regards the question of tuberculosis and pulmonary phthisis, the matter would be much simpler if a general understanding could be arrived at as to the definition of tuberculosis and phthisis in its different anatomical manifestations. The pivot of the question is, what to call a tubercle, or a tubercular lesion.

The traditional conception of a tubercle being a miliary node, the belief is that nothing is tuberculosis unless expressed by nodes, and that everything is tuberculosis that appears to the eye as containing nodes. These misconceptions are what bring the confusion and prevent the settlement of the question of tuberculosis, both at the post-mortem table and in the hands of the experimenter.

One of the results of this confusion is that some clinicians divide pulmonary phthisis into catarrhal, cheesy, fibroid, and tubercular proper, because they do not see tubercle nodules in some of these forms of phthisis. They seem not to be aware of the fact that miliary tubercles do not belong necessarily to the picture of pulmonary phthisis; and, on the other hand, that those nodes which occasionally appear as miliary tubercles are not miliary tubercles at all, but are only

miliary foci of broncho-pneumonia, due to aspiration, as will be explained later. Miliary tubercles, if at all present, usually form a part of a general disease, a tuberculosis of the whole body. In rare instances, when the miliary eruption takes its departure from the lung, the miliary nodules may be limited to the lung.

A more serious matter is the mistake that experimenters make of interpreting as tubercles the so-called inhalation tuberculosis, artificially produced in animals by means of a spray with tuberculous and other matter. The nodules produced in the lung under these circumstances are not miliary tubercles—in fact, no tubercles at all. They are simply miliary broncho-pneumonic foci, limited to those terminal collections of air-vesicles, called acini, in which some of the inhaled irritative material became lodged. The natural round boundaries of these acini correspond exactly to the usual size of miliary tubercles, and appear as such even under the microscope, although filled merely with an unorganized inflammatory exudate. The uniform distribution of these foci is due to the fact that the inhaled irritating particles are distributed only to individual and the most accessible bronchioles and acini, thus simulating a true miliary tuberculosis of the lung. Similar broncho-pneumonic foci occur in the human lung from self-aspiration of tuberculous material from a primary focus to some other portion of the lung or throughout the whole lung. This was proven long ago, but the inhalation experimenters appear not to be aware of that fact. Careful personal observations and experiments, to be recorded in my forthcoming report, have convinced me that such inhalation experiments prove nothing, either for or against the contagiousness of tuberculosis, in connection with which they have been brought forward as the strongest affirmative proofs. Furthermore, it must also be remembered that the so-called experimental inhalation tubercles, as a rule, remain local.

On the other hand, miliary nodes or tubercles are met with, not only in tubercular lesions, but also in a variety of similar and dissimilar lesions, such as pearl disease or bovine tuberculosis, lupus, leprosy, glanders, actinomycosis, chancre, and gummata, cancer, typhoid infiltration, lymphomatous and leukæmic lesions. All these lesions, even cancer ("miliary carcinosis"), are able to give rise to exquisite miliary disseminations, or eruptions, although these are most frequently observed in tuberculosis. We already recognize leprosy, lupus, glanders, syphilitic, and other tubercles, in contradistinction to tuberculous or serofulous tubercles.

To the above nodular formations may be added a variety of minute inflammatory foci of granulation tissue organized around minute foreign bodies introduced experimentally into various tissues; also, "false tubercles," such as mere unorganized collections of lymphoid cells, held together by some fibrine or by some artificial or natural round boundaries, such as is the case with the referred-to "inhalation tubercles;" and further, also, the eruption and follicular enlargements in the skin and mucous membranes.

The question now arises, how to distinguish between these various kinds of nodules, apart from their clinical features. They may all under-

go a cheesy or a fibrous change, may calcify, and may contain giant cells. In all, bacilli may be found if a cheesy change occurs, or tends to occur, save in cancer and in leukæmic formation. Without desiring to appear skeptical, I must say, however, that it takes the skill of a Koch to differentiate, sometimes, the bacilli met with in the various kinds of nodes, even after applying all microchemical tests.

The true tuberculous tubercles occasionally do not show any bacilli whatever, as I will prove from personal observation, and from the reliable testimony of others. It will also be shown that the only test now left for determining the pathogenic peculiarity of tubercle—namely, the asserted exclusive property to produce tuberculosis—is conditional and uncertain, since substances, not tuberculous, may, under similar condition, have the same effect.

Therefore, it is impossible to define tuberculosis, either by its anatomical peculiarity or by the pathogenic property of its nodes.

Another important point in the natural history of tuberculosis is the cheesy degeneration of its products; but here, again, we are surrounded by difficulty if we take only the cheesy product into consideration, because all the lesions mentioned before as being characterized by, and as being capable of, nodular eruptions, have the tendency to undergo cheesy change. Besides this, simple inflammatory products have been observed to undergo a similar change, as is instanced by that form of cheesy hepatization, sometimes following croupous pneumonia, and also by certain forms of rapid necrotic changes, such as occur in acute septic inflammations, designated lately by the name of coagulation necrosis. It must, however, be remembered that the total absence of cheesy masses in the body of tuberculous subjects has been observed.

To tell tuberculosis from allied lesions is only possible after a consideration of the soil in which it develops, and the location of the products, together with the clinical and anatomical manifestations.

What is the origin of tubercle nodules?

The primary occurrence of miliary tubercle nodes is, to my mind, very questionable. I have never seen it occur without the co-existence of diffuse granulation tubercle. This granulation tubercle is recognized by all as being a simple inflammatory granulation tissue, characterized by cells somewhat larger than ordinary lymphoid cells, containing usually giant cells, but undergoing very readily cheesy change on account of its deficiency in blood-vessels. This tissue is regarded by most pathologists as secondary to miliary tubercles; but I think, after careful observation, that the reverse is the case; because I have never seen upon the post-mortem table, or in animals, primary miliary nodes without the granulation tissue, while the granulation tubercle tissue does not exist very frequently without the nodes. Moreover, primary miliary tuberculosis is unknown.

That tubercle is primarily a simple granulation tissue of inflammatory origin has been proven experimentally. E. Ziegler (Centralbl. f. d. Med. Wis., 1874, No. li.) made the following interesting experiment: He inserted below the skin or into the peritoneum of animals, a number of pairs

of glass covers, each pair glued together in such a manner that between them there existed an interspace just large enough to allow the entrance of white blood corpuscles; and these corpuscles, not being severed from the body of the animal, then formed a tissue between these plates of glass, which, upon removal after various periods, could be readily examined under the microscope, and the conditions of tissue formations traced. Under these circumstances it was observed that whenever blood-vessels had developed in the new-formed tissue between the glass plates, an organization of the cells into a perfect connective tissue took place; but when the formation of blood-vessels had failed to occur, then a tissue simulating tubercle tissue was formed, made up of epithelioid and giant cells, and cheesy changes had occurred. Ziegler very properly declared the latter product

to be tubercle tissue. I have had, and have at present, ample opportunity to corroborate the accuracy of these observations. Ziegler's experiments were repeated in the pathological laboratory of the University of Pennsylvania, by Hammer, and at present are being carried on by Woodnut. By these experiments, made with slight modification, after the method of Ziegler, under varying conditions and upon various animals, it was shown that the granulation tissue gradually gave origin to tubercle nodules. Furthermore, these experiments showed that the tubercle nodes and cheesy changes ensue without the action of bacilli, as the latter were found not to be present when proper care was taken, during the execution of the experiment, to exclude them.

(To be continued.)

EDITORIAL DEPARTMENT.

PERISCOPE.

The Influence of Malarious Disorders on Urethral Fever, with Remarks on the Treatment of Stricture.

In the *Brit. Med. Jour.*, February 23, 1884, Dr. John Ward Cousins thus writes:

During the recent debate on urethral fever in the Medical Society of London, the President (Sir Joseph Fayrer), referred to the association which frequently exists between urethral fever and the paroxysmal fevers of malarious climates. He remarked "that the disease is uniformly more severe, and more probable to recur, in malarious climates than in our comparatively temperate one;" and that "persons who have been under the influence of malaria, and have lived in malarious climates, are more liable to suffer from this condition than others." Now, the great practical value of these observations must be very evident to every surgeon who is called upon to treat patients laboring under disorders of the urinary organs, after a residence in a malarial and tropical climate. Many instances have occurred in my surgical practice, proving this association between urinary and malarious disorders, and the necessity of special care in the management of stricture of the urethra under these circumstances. After complete freedom from the disease for a long period of time, the mere passage of an instrument into the bladder is, sometimes, followed by an attack of paroxysmal fever, marked by rigors, elevation of temperature, sweating, and high-colored urine. For example, not long ago, a gentleman consulted me for stricture who had suffered from several attacks of fever some years before, during a residence in the northern districts of India. After many days' rest and preparation, I examined the stricture, and easily passed a soft instrument into the bladder. Within a few hours he had a well-marked fit of ague, and on my visit

the following day, he said to me: "You have brought out a sharp attack of my old fever." The paroxysms occurred regularly for some days, and then subsided, with the aid of quinine, rest, and warm baths. As soon as he was convalescent I sent him away, and in a month or two he returned to me much improved in health. With great caution I commenced again the surgical treatment, and soon cured the stricture without any re-appearance of the old disorder.

The remarkable tendency of malarious fevers to impress a character of periodicity upon subsequent ailments has often been a matter of observation. Their characteristic features manifest a disposition to recurrence after a long series of years, under any shock or depression of the system. Sometimes, prolonged exposure to malarious influence issues in a morbid alteration of a great many organs and tissues; but, even when no trace of structural disease is discoverable, a deep impression is often stamped upon the nervous system. A special liability, however, to the recurrence of paroxysmal fever is observed in connection with disorders of the urinary organs. This is dependent upon the normal sensibility of these organs, and their intimate relation to the spinal and vaso-motor centres. The readiness with which direct stimulation upon them may induce constitutional disturbance, and their proneness to reflex irritation, are indications of their widely spread nervous associations. Now, to this susceptibility must be added the persistent effect of the malarious poison upon the nervous system. Its specific action has long passed away; still there remains behind a nervous instability, which permits a reflection of any impulse through the old tracts, and a reproduction of a disturbance—an exact counterpart of the former fever, attended with all its characteristic phenomena.

In many other nervous and neuralgic diseases, a persistent instability of some central or peri-

pheral part of the nervous apparatus is often a well-marked feature, and many striking examples can be readily recalled, showing that obscure sensibility lingers long in channels once acutely disturbed, and that any sudden depression of the system is often sufficient to arouse long-forgotten pains and morbid sensibilities.

One word in reference to the surgical treatment of malarious patients suffering from stricture of the urethra. It is always necessary in these cases to proceed with the greatest gentleness and caution. The risk of urethral fever is far greater than under ordinary circumstances, and this must be combated at the onset by suitable measures for improving the health and vigor of the system. Great benefit results from tonic treatment and quinine, combined with rest, careful diet, and warm baths.

As regards the surgical management, heroic measures, in my opinion, must be excluded, as both unsuitable and unsafe. Rapid dilatation and splitting are generally out of the question, and will surely be followed by disturbance, stamped with malarious periodicity. Even gradual dilatation cannot be undertaken too cautiously. The operation should always be performed in a warm room, and with the patient well protected with warm clothing. It is my practice to fill the urethra with warm oil, and always to use soft tapering dilators, introduced over a catgut or whalebone guide. The instruments should be very gently manipulated, without causing pain or any mechanical injury. We must always be satisfied with very slow progress, and, during the early stages of the treatment, it is often desirable to allow an interval of several days. With these simple precautions, I have generally found that the urethra soon becomes tolerant of mechanical interference.

Amenorrhœa and Vicarious Menstruation.

Apropos of this subject, it is of value to note the following from the *London Medical Times*, because it bears the authority of no less a name than Dr. Samuel Wilks:

I have been much impressed with the practical importance of the lecture published in this journal by Dr. Matthews Duncan, on "Amenorrhœa and Vicarious Menstruation;" for although the views therein contained are no doubt in accordance with the opinions of many experienced men. I cannot but think that a large number in the profession require to be roused up to their truth. As regards vicarious menstruation, I have never published my opinions on the subject, but as a teacher of students, I have always denounced the absurdity, as well as the error in fact, of a belief in this imaginary disorder. I have had considerable experience of diseases, both in public and private practice, and I am still waiting to see an instance of this curious condition before I can throw off my incredulity. It seems to me that some of the greatest advances in medicine have been not so much by adding new facts to our knowledge, as by getting rid of old wives' fables, which, originating in the dark ages, have finally undergone a kind of glorification in the medical mind.

If there be no such thing as vicarious menstruation,

the subject had better be eradicated from our medical books, and be no longer instilled into the minds of the young, as is now, unfortunately, the case, as I know from long experience as an examiner. Such questions as the causes of hæmoptysis and hæmatemesis are amongst the commonest put to candidates for diplomas, and one never fails to hear much about vicarious menstruation. I have seen my late colleague, Dr. Peacock, at the College of Surgeons—a man of the mildest temper—get really angry when student after student would give vicarious menstruation as the first cause for hæmatemesis, looking over such frequent conditions as ulcers or cirrhosis. The reason was clear: their memory was impressed by the very strangeness and oddity of the disorder, and so it came first to the front.

But lately having had to correspond about a case of hæmatemesis, in which vicarious menstruation was suggested as a cause, I was referred, in consequence of my skepticism, to Watson's lectures, a gospel which could not be gainsayed. I gladly refreshed my memory, but was certainly surprised to find that the author regards this condition as a very common occurrence. It is remarkable, however, that he relates no case of his own, but is content to give particulars of two cases, which date back nearly a century from the present time. Sir T. Watson says, "Women are liable to perverted menstruation (so to call it) through other channels than the natural one. Hemorrhage from the stomach occurring vicariously of menstruation is abundantly common. I told you, in a former lecture, that patients will sometimes menstruate, for years together, through the lungs; more commonly do they menstruate through the stomach." It is very significant that Sir Thomas mentions no case coming within his own knowledge, but is content to relate a case which was told him by Dr. Latham, and ends the story by saying: "This was the woman's own account, and there appeared no reason to question its accuracy." His other case is quoted from Pinel, and is that of a woman who spent her life in the *Sapètrière*: "This woman continued to menstruate through her lungs, at each monthly period, from her 16th to her 58th year, i. e. during 42 years." It may be observed how the change of locality of the function lengthened its activity to a very advanced period of life.

I feel great reluctance in thus criticising so esteemed a writer as the late Sir T. Watson, but the greater the weight of his authority; the more need there is of thoroughly sifting the truth of doctrines of so extraordinary a nature as I have quoted.

As regards the other subject of Dr. Duncan's lecture, amenorrhœa, I will only say a few words, since it is treated as a substantive complaint by many gynæcologists. For my own part, I know nothing of such a disorder, nor of such remedies as emmenagogues. I believe myself that amenorrhœa, like many other complaints, is the remnant of a popular delusion; and if so, it should be eradicated, like the other disorder, from the medical mind. I have a letter in my desk, written by a qualified medical man, in reference to a young lady, the subject of phthisis, in which he says that if I could give an emmenagogue to bring on the menstrual function, he had no doubt the pa-

tient would get better of the chest disease. I wrote back to say that I heartily agreed with him. This is only an extreme example of what one hears daily in cases of chlorosis and other disorders of girls. Feeling, therefore, so much in accord with the sensible opinions propounded by Dr. Matthews Duncan, I trust they will find their due weight on the minds of the younger members of the profession.

The Diagnosis of Mitral Constriction.

The *Med. Times and Gaz.*, January 5, 1884, says:

Simple mitral constriction is of far more frequent occurrence than is generally allowed, and its diagnosis probably presents greater difficulties than any other serious lesion of the valves on the left side of the heart. We exclude from consideration cases which are complicated by regurgitation, because the latter, when advanced enough to produce grave symptoms, is easily detected; and the presence of constriction as well in such cases is not of great practical importance. But when, as not rarely occurs, the question is whether stenosis of the mitral orifice be present, and the cause of serious symptoms, or whether the heart be healthy, and the distress and danger due to other conditions, accurate diagnosis becomes a matter of the utmost moment. In a typical case the observer feels a thrill at the apex preceding the impulse of the heart; he hears at the base a clear second sound over the aortic valves, an exaggerated one to the left of the sternum, and at the apex a rolling presystolic murmur, gradually increasing in intensity and leading up to a short and sharp first sound, which is not succeeded by any appreciable second sound. The diagnosis of mitral stenosis under such circumstances admits of little doubt.

But in a second series of cases both murmur and thrill may be absent, and the heart's action regular; and the difficulty of detecting the disease then becomes great. The most striking auscultatory phenomena are accentuation of the second sound at the base to the left of the sternum, and, what is of much greater importance, a peculiar hesitation in the production of the first sound, a kind of hanging fire, which is easier for the experienced auscultator to appreciate than to describe. Whatever be its origin, whether it be a faint sound caused by the blood passing through the constricted orifice into the ventricle, and so practically a murmur, or be due to a slowly beginning, though suddenly ending, ventricular contraction, it is a phenomenon which at once strikes the ear and suggests the nature of the disease. In these and all other cases of suspected constriction of the mitral orifice, the detection, if possible, of increase in size of the left auricle and right side of the heart, yields valuable corroborative evidence.

There is a third class of cases, in which there may be no murmur, no thrill, no hesitating first sound, but extreme irregularity of the cardiac action, the beats being very frequent and very irregular both in rhythm and in force; so much so that a great many of them produce no pulsation at the wrist. In some cases as many as half the beats of the heart are not felt in the radial artery,

so that the pulse there may be moderate in frequency, although the cardiac contractions succeed each other with extreme rapidity. Similar phenomena may likewise be observed in cases of simple dilatation of the heart with degeneration of its walls, such as occurs, for example, in chronic bronchitis and emphysema; but then the patient is usually past middle life. If grave cardiac symptoms be found in a comparatively young person, and if auscultation only reveal extreme irregularity in the heart's action, the presence of mitral stenosis ought to be at once suspected. The administration of digitalis in such cases not only often removes the patient's distress, and produces regularity and normal frequency of the heart's beats, but also facilitates diagnosis. For when the heart's action gets slow and regular, a presystolic murmur frequently makes its appearance.

Finally, there are cases of considerable mitral constriction which produce no sufficiently well-marked morbid phenomena to enable the observer to detect the presence of heart disease. But the pathologist not infrequently meets with these narrowed orifices in the post-mortem room in patients who have died from other diseases. The reflection is then forced upon him, how extreme some pathological conditions require to be, before they come within range of our present powers of diagnosis.

Anuria from Compression of Ureters by Cancerous Disease.

To the Boston Society for Medical Improvement (*Boston M. and S. Jour.*, March 6, 1884), Dr. Minot showed the specimen, which was taken from a woman fifty-three years old, who entered the Massachusetts General Hospital February 13, and died February 21. She was a widow; never had children or miscarriages. For about three years she had occasionally observed slight discharges of blood from the vagina. For the past six months there had been slight leucorrhoea, soreness above the pubes, frequent micturition, and occasional painful defecation. For four weeks there had been great thirst, polyuria, and itching of the arms and of the anus. She had lost much flesh and strength, but had been in bed only nine days. She was anæmic and sallow. Temperature 99.8° F., pulse 120, respiration 26. On the 14th she passed sixteen ounces of urine in twenty-four hours. This was examined by Professor Wood, who reported it as pale, specific gravity 1008½, neutral, a slight trace of albumen, very large excess of bladder and vaginal epithelium, and also clumps and isolated large spindle-shaped and caudate cells, suggestive of morbid growth, a little blood and pus. On the 15th, one ounce of urine was drawn by catheter, and from that time, during the remaining six days of her life, the patient passed no urine, except about two drachms with a defection on the 18th. She vomited everything taken, and her breath had a urinous odor. The vomitus of the 20th, also examined by Professor Wood, was found to contain 6.7 grammes of urea to 912 cc. There was pain in the right flank. She retained consciousness to the last, although drowsy much of the time.

The autopsy, made by Professor Fitz, showed that the enlarged uterus filled the pelvis, and was

adherent to the bladder and rectum and to the pelvic walls. The bladder contained half an ounce of turbid urine. On its posterior wall was an ulceration three-quarters of an inch in diameter. The uterine cavity was four inches in depth; the os externum readily admitted the forefinger. The substance of the uterus was transformed into a uniformly opaque, white tissue, from which on pressure sebaceous-like plugs were squeezed. This change extended to the fundus, where there was a round, laminated nodule, easily crushed, but with no sebaceous-like plugs. The left ureter was dilated and tortuous, and obliterated for an inch and a half at the vesical end by means of a soft gray new formation. The left kidney formed a sacculated tumor of the size of the fist, only a thin seam of renal tissue being left. The right ureter was dilated, the vesical opening was the size of a pin, and the course of the vesical end tortuous. The right kidney was half as large again as the left, its surface grayish-white, the cortex easily detached, increased in thickness, anæmic, not opaque; tubular regions indistinct; pelvis moderately distended. Lymph glands over promontory of sacrum enlarged to the size of an English walnut; on section white, and homogeneous, and numerous sebaceous plugs were squeezed out on pressure.

An interesting feature of the case was the diagnosis of morbid growths by means of the microscopic examination of the urine; also the evidence of the partial elimination of urinary constituents by the lungs, and probably also by the mucous membrane of the stomach. The preservation of consciousness along with urinary suppression is remarkable, but not very unusual. Dr. Minot had before reported to the Society a similar instance. The treatment consisted mainly in the subcutaneous injection of pilocarpine, in the hope of relieving the kidneys through vicarious action of the skin. Dr. Minot showed two microscopic specimens, kindly prepared by Dr. H. F. Vickery; one was taken from the enlarged glands in the lumbar region, and the other from the uterine tissue. They showed the characteristic alveolar structure of flat-celled cancer.

Lesions of the Eye Due to Rheumatism.

From a foreign exchange we learn that Professor Panas lately delivered a very interesting lecture at his clinic at the Hôtel Dieu on this subject. He began with the statement that the relation between affections of the eye and the different diatheses was little known among the ancients, and it was only at the end of the last century that the idea of connecting rheumatism with diseases of the eye was entertained. The classification of ocular affections was somewhat confused as regards the diathesis. Thus we find acute glaucoma classed among the rheumatic affections of the eye. In our own time there is less confusion in the classifications; but, notwithstanding the improved methods of diagnosis at our disposal, there is yet a great deal to be done in the way of assigning each disorder or group of disorders of the eye to its proper diathesis. For instance, iritis is, for the most part, ascribed to syphilis; it is, indeed, the tendency of the day to put down almost every manifestation of disease to that affec-

tion. According to M. Panas, the proportion of iritis due to syphilis is not nearly so great as is generally given in classical works on ophthalmology, and a larger margin may be left for rheumatismal iritis, with which iritis of syphilitic origin is so frequently confounded. The one is perfectly distinguishable from the other, the former assuming always the serous form, whereas the latter assumes the plastic form. Rheumatismal iritis is, therefore, also termed serous iritis, and is accompanied by extravasation of fluid into the anterior chamber of the membrane of Descemet, which M. Panas considers pathogomonic of this affection. Moreover, the synechiæ that are produced in rheumatismal iritis are easily broken; this is an important element in the prognosis of the disease, and is to be met with only in rheumatic subjects, particularly of the chronic form; it is very frequently also found among gouty individuals, but it exists rarely as a complication of acute articular rheumatism. The cornea is less susceptible to the influence of rheumatism; and, strange to say, the sclerotic is not mentioned in this connection, as *a priori* the fibrous nature of this membrane would seem to point to it as the seat of predilection of the manifestations of a rheumatic or gouty nature. After entering into considerations of other parts of the eye in connection with rheumatism, Prof. Panas stated that ophthalmologists are as yet undecided as to classifying conjunctivitis among the manifestations of rheumatism, as it is so easily confounded with conjunctivitis resulting from other causes. As regards treatment, the lecturer dwelt upon the necessity of combining general with local measures, keeping in view the diathetic connection that may exist between the rheumatism and the ocular affection, without which the treatment must end in a lamentable failure; thus, salicylic acid for the rheumatic diathesis, mercury for the syphilitic, colchicum for the gouty, and iodine for the scrofulous.

Visceral Lesions in a Case with Epileptiform Attacks.

To the New York Pathological Society Dr. R. W. Amidon gave the history of a case of epileptiform attacks occurring in a boy seven years of age, of very bright intellect, coming from a neurotic family. When three years of age he suffered from measles, which were followed, according to the mother's statement, by general oedema; and at about the same time spells developed, which were treated by the attending physician with bromide of potassium, ten grains three times a day. At the time when Dr. Amidon saw the patient, there was an eruption from bromism upon the legs, face, and forehead, which readily disappeared on discontinuing the medicine. Respecting the attacks, Dr. Amidon said the following facts were against the idea of epilepsy: first, he had never known a person to have seventy-two regular epileptic convulsions in as many hours, and yet retain comparatively good health and a clear head, as this patient had done. Second, the child had a distinct recollection of each convulsion, and was always able to foretell their occurrence. Third, it never uttered a cry before the convulsion. Fourth, it never bit the tongue, nor frothed at the mouth. Fifth, there was preserva-

tion of sensibility and resistance to opening the eyelids during the attack. Certain of these facts led to a diagnosis of hystero-epilepsy and a favorable prognosis. The remedies employed in the treatment were aqueous extract of opium, cannabis indica, quinine, iron, tonics, regulation of the diet. There were symptoms of improvement under treatment, but relapses occurred. Death finally took place from œdema of the lungs and heart-failure. At the autopsy, the stomach was found dilated, the spleen enlarged and congested, the kidneys congested, with atrophy of the cortex. The right ventricle of the heart was dilated, and there was fatty substitution in its walls; the left was concentrically hypertrophied; the right auricle was thinned and dilated. The brain was normal and well developed. Had the condition of the stomach been recognized during life, he should at once have resorted to hypodermic medication.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

Estudios Clínicos de Neuropatología. Per Jose Armangué y Tuset. 1 vol., 8vo., pp. 244. Barcelona, 1884.

The study of the nervous system, in its various relations, has long occupied the attention of Dr. Armangué, and in this volume he collects a number of articles which he has from time to time contributed to the medical press on this subject. They are characterized by extensive reading, and also by the fruits of close clinical observation. He combines a thorough theoretical knowledge, with the habit of bringing it to bear on points in practice, which is something always pleasant to note in an author.

Practical Pathology. By G. Sims Woodhead, M. D., Demonstrator of Pathology in the University of Edinburgh. With 136 Colored Plates. 8vo., pp. 484. Philadelphia: H. C. Lea's Son & Co.

There are many treatises on pathology, but none devoted to the methods of studying, examining, and preparing morbid tissues. This want the author of the above work aims to supply; and he has succeeded in a very creditable manner. His directions are full and clear, and the numerous illustrations, in colors, of morbid products, natural and stained, are really beautiful.

The first chapter defines the methods of making a post mortem examination. The remaining thirteen take up one part or organ after another, explain its normal structure, and then recite and illustrate the various pathological changes to which it is liable, with the appropriate treatment to develop its microscopic character, and to prepare it for demonstration. To the student of pathology who knows how to handle his micro-

scope, we can recommend no better book than this as a guide in his investigations.

The Cinchona Barks, Pharmacognostically Considered. By Friedrich A. Flückiger, Ph. D. Translated, with Notes, by Frederick B. Power, Ph. D., Professor of Pharmacy in the University of Wisconsin. Philadelphia: P. Blakiston, Son & Co. Price, \$1.50.

Prof. Flückiger, of Strasburg, is one of the highest living authorities on drugs, and this monograph is worthy of his reputation. It treats of the botanical origin and species of cinchona, its natural habitat, varieties, its culture in different parts of the world, spurious barks, chemical constituents, estimation and manufacture of its alkaloids, history of its introduction, and bibliography of the subject. Eight lithographic plates, of a botanical character, are appended.

The translation leaves something to be desired. The German idiom is occasionally followed so closely that the sentences are obscure.

The International Encyclopædia of Surgery. Edited by John Ashhurst, Jr., M. D. Vol. IV., pp. 987. William Wood & Co., New York.

The contributors to this volume of this important work are Dr. John H. Packard, on injuries of the bones; Mr. Richard Barwell, M. R. C. S., on injuries of the joints; Dr. John Ashhurst, on excisions and resections; Dr. George E. Fenwick, on excision of the knee-joint; Mr. H. T. Butlin, M. R. C. S., on tumors; Dr. John A. Lidell, on injuries of the back; and Mr. F. Treves, M. R. C. S., on malformation and diseases of the spine.

Of the general excellence of the work it is superfluous to speak. Each of these writers contributes a careful monograph on the subject of his choice, and the reader cannot complain of anything but an excess of matter. There is perhaps too diffuse citations of cases, and the bulk of a large octavo of a thousand pages is rather discouraging to the average reader.

In an examination of the several articles, that by Dr. John H. Packard, on fractures, and that by Mr. Butlin, on tumors, have impressed us as being particularly satisfactory, the matter being exceedingly well arranged, and presented with great clearness and compactness.

Quite a number of lithographs, plain and colored, and wood cuts, embellish the volume, and add to its usefulness.

—Last year the students at Edinburgh University numbered three thousand three hundred and forty. When its new buildings are completed it will be the largest university now existing.

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THE
QUARTERLY COMPENDIUM
OF
MEDICAL SCIENCE.

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THE DIET CURE.

A most fruitful field for investigation, and one that has been comparatively little explored, is that which will unfold to us the intimate influence of our different articles of diet upon the human body in health and disease. When we realize that the food taken into the stomach is destined to be carried to and become most intimate integral portions of every tissue and organ in the body, we must perforce recognize that the nature of our food must have considerable influence upon the nature of the constituents of our bodies, and if, as it seems reasonable to suppose, chronic diseased conditions are characterized by alterations or changes in the composition of our bodies, then might we be allowed to reason, that if we send certain pabulum to these organs and tissues certain effects will result.

Is it too far-fetched to suppose, that the same results which we now achieve by sending drugs to the tissues and organs, may be accomplished by the sending of proper articles of diet?

Food and drugs are each composed of an aggregate of elements that certainly must have definite action on the tissues and functions of our bodies. In this connection it will be interesting to read the following communication from Dr. T. R. Allinson in the *Brit. Med. Jour.*, December 29, 1883:

"I have just concluded an experiment which I think may be of service, or may lead to some observations which may be of use in the prevention and cure of disease. I have discontinued the use of flesh meat for nearly two years; but, on October 19, I left off the use of all animal products, such as milk, butter, cheese, eggs, and honey. My weight was then 9 stones 8 ounces. In a month's time (the time my experiment lasted), my weight was 9 stones, 3 pounds, 12 ounces, or a gain of 3½ pounds. The change was not pleasant at first, as I gave up the use of salt and pepper as well; my food tasted mawkish, and I was soon satisfied; but a week's practice soon made me relish my food, and now salt tastes distasteful. My usual exercise is from ten to fifteen miles a day, and I went on the same as ever, and I seemed none the worse for my change of diet. I even lost my mild bilious feelings, which butter and cheese give rise to. I only broke my experiment once, and that was on November 14, when I had

a piece of cake which had an egg in it, but no butter. I calculated I took then a sixteenth of an egg.

My food was as follows: Breakfast, at 9 a. m., consisted of porridge made from equal parts of oatmeal and wheatmeal. This was followed by a cup of hot water, flavored with fruit syrup and sweetened with sugar. At the same time, I had some bread fried in refined cotton-seed oil, or vegetable haggis fried in the same, the haggis being composed of oatmeal, wheatmeal, tapioca, mixed herbs, and Spanish onion, boiled in a cloth like a pudding. Dinner was taken at 2 or 3 p. m., and consisted of a thick vegetable soup eaten with wholemeal bread, or potato and onion pie, savory pie, vegetarian pie, vegetable stew, stewed rice and tomatoes, etc. This was followed by a bread plum pudding, stewed figs, prunes, or raisins, and bread, or stewed rice and these fruits, etc. Tea meal, at 5.30 p. m., consisted of some fruit syrup and water, or a sup of cocoa. I had with it some bread and jam, stewed fruit, or green stuff, as celery, tomatoes, watermelons, etc. Frequently I had only two meals a day, and a cup of cocoa and a biscuit at 8 p. m. The cost of my diet was a little over twelve cents a day, and I could easily live for less. The quantity was not more than my usual amount. Now I have again returned to milk, butter, eggs, and cheese, when out visiting, but rarely are they seen on my own table.

I think the diet-cure will be found the philosopher's stone of medicine; by diet we can in a great measure prevent seven-tenths almost of our present diseases; or, if disease has set in, then simple food will allow the patient to recover most quickly. Most of our modern diseases can be traced to dietetic errors; excessive flesh-food, and want of active outdoor exercise and fresh air, must be blamed for our diseases. All stomach-complaints, as indigestion, dyspepsia, gastric catarrh, biliousness, congestion of liver, jaundice, gastro-enteritis, hemorrhoids, etc., are due to excess or wrong kinds of food; whilst biliary calculi, urinary calculi, rheumatism, gout, atheroma, Bright's disease, and apoplexy, all point to excess of nitrogenous material, which the system cannot get rid of, and so it remains and produces disease. The kidney being blocked up, more work is thrown on the heart, which then hypertrophies or becomes enlarged, the lungs share in the back-working, and thus the whole system becomes affected. Most of these diseases can be cured, or at least relieved, by a non-flesh diet. Epilepsy is often cured, and always relieved, by such a diet; and even cancer's wasting hand may be partially stopped. Most chronic cases can be relieved by

our diet, and I have known some severe cases of general eczema cured by it alone.

The subject is well worthy of the study of our scientists; and, if possible, I intend showing by experiment how urinary calculi may be dissolved by diet, and so the operation of lithotripsy and lithotomy be avoided in many cases. The great secret of medicine must be, first, prevention; and, second, where disease already exists, its cure. If any one would like to try this diet, I shall be glad to forward them a cookery-book containing over ninety recipes, on receipt of two stamps for postage, etc. It contains many dishes suitable for invalids, convalescents, those in delicate health, and others."

The thoughts suggested in this communication are well worthy of elaboration, and we doubt not that a careful, extended, and concerted inquiry in this direction would be productive of most beneficent results.

THE CASE OF DR. BERNARDY.

Dr. E. P. Bernardy, of the Blockley Hospital, who had charge of the recent epidemic in the Children's Asylum, has handed his resignation to Poor Guardian Ruhl, with the request that it be presented to the Board at its next meeting. The letter reads as follows:

NO. 221 SOUTH SEVENTEENTH STREET,
PHILADELPHIA, February 25, 1884.

TO THE PRESIDENT AND MEMBERS OF THE GUARDIANS OF
THE POOR:

GENTLEMEN: Feeling that my course in not calling a consultation early in the epidemic (which I learn has not been usual) has been unsatisfactory to some of the members, I hereby tender my resignation as member of the Obstetrical Staff of the Philadelphia Hospital—at the same time feeling that I have performed faithfully and conscientiously my whole duty.

Respectfully,

E. P. BERNARDY.

When a man is persecuted, he should be defended; this is a law that is recognized by every right-minded man. We speak from experience, when we say that Dr. Bernardy is right when he says that it has not hitherto been customary to call for consultation in time of epidemics in Blockley. We know of an epidemic of puerperal fever in that institution, wherein thirty out of seventy-five parturient women died; no consultation was held, and no fuss was made about it. We do not argue that such is right and proper: we merely state that such has been the case.

Again, it is well known among all those who know anything about Blockley, that great mortality among the foundlings, when disease gets in among them, is always looked for; the inmates of the Children's Asylum are, for the most part, the offspring of illicit love, crime, drunkenness, and disease; they have been usually abandoned by their parents and subjected to exposure before being brought to the institution, by which the little vitality they have received at birth has been seriously deteriorated; hence they lack the stamina to successfully resist the inroads of disease. We do not wish to be understood as defending Dr. Bernardy's action in not calling for a consultation; for if such a regulation had been passed by the Board of Guardians, and he failed to comply with it, then he was derelict in his duty, and deserved punishment; but if such a regulation had not been made, and we have not heard that it had been, then we say that Dr. Bernardy was unjustly treated, because he was acting in accordance with the *customs* of the institution. Dr. Bernardy may be unpopular (we know nothing about this matter), but the request for his resignation was surely not justified by his action. We have had no conversation with any one about this case, but we feel that a forced resignation from an official position is so calculated to injure a man's reputation, that a vindication should be offered when the premises clearly warrant it. We venture to say that personal considerations had much more to do with Dr. Bernardy's removal than any infringement of rules or neglect of duty.

THE PROPOSED NATIONAL PHARMACOPŒIA.

Some surprise has been manifested in certain quarters that a bill was introduced into the House of Representatives to prepare and publish a National Pharmacopœia. The chief of the Marine Hospital Service, of the Navy, and of the Army are each to detail two medical officers, and the officers are to invite the American Medical Association and the American Pharmaceutical Association to form committees of not more than three members, and thus constituted, this board shall

proceed to the work of forming a new pharmacopœia, which will be published by the Government.

An article in a contemporary tries to make it appear that this project arises from a local rivalry; also that a revision is not needed; and, finally, that the attempt will fail.

Perhaps it will fail. Many laudable efforts do. But we take this occasion to remind the profession and the pharmacists of the United States that the publication of the last edition of the Pharmacopœia was the result of an arrangement which had all the appearance of a discreditable "deal" between the Committee of Publication and a publishing house. We pointed out the facts at the time, gave the names of the committee, and called on them for an explanation. (See *REPORTER*, vol. xlviii, page 105.)

Did they offer any explanation? No. They trusted to silence rather than to trust to an open statement.

Other journals, both of pharmacy and of medicine, repeated these accusations, supporting them with documents. Still no reply from the committee.

The *method of publication*, therefore, stands convicted as an unsound one before the country. The result has been that a publishing house has reaped a rich harvest at the expense of physicians and pharmacists, at the expense of the copyright holders, and at the expense of the good repute of the Committee of Publication.

Was the revision well done? It has been severely criticised, certainly in some respects justly. There can be no doubt but that it would be a great advantage to have it repeated. The complimentary words of a few reviewers cannot stand against the opinion of those who have studied the volume carefully. It is altogether to the interest of both parties interested—pharmacists and physicians—that the Pharmacopœia be a government publication.

THE VIVISECTION QUESTION.

The interest in restraining vivisection continues active in this city. It is, however, not illiberal,

as it has been represented in some quarters. One of our city contemporaries, for instance, writes editorially: "Years ago we offered to accept such a bill as has since been passed in Great Britain. Happily, hysterical counsels prevailed, and the ladies concerned promptly refused any aid which did not concede total abolition."

This is an error. A copy of the bill advocated by the ladies (*i. e.*, the Women's Branch of the Pennsylvania S. P. C. A., Mrs. C. E. White, President) is before us, and it permits any experiment or demonstration whatever under anæsthesia, and any experiment or demonstration without anæsthesia, except such as are "for the purpose of illustrating or demonstrating any fact, process or theory already known to science or medicine." In other words, it did not throw any obstacle in the way of original research. Furthermore, we have the best authority for saying that the ladies never refused any proffered aid in urging this bill.

It is our own opinion that this whole matter of vivisection should be left to the conscience of the profession. We should not object to such a bill as was proposed, except that it assumes to dictate where dictation is out of place—in the conscientious pursuit of scientific truth. No instance has come to our knowledge in this commonwealth where a physician has been charged with needless cruelty to animals used for this purpose. We consider, therefore, that the ladies and their male friends who agitate in this matter are acting unnecessarily and unwisely. There are a thousand cases of human suffering, yes, ten thousand, in this commonwealth, which call for relief, to one case of a cat or dog; and to the simplicity of our mind it would seem more in keeping with true benevolence to look after the former. For all that, we would not have these excellent ladies remain under the burden of any erroneous imputations.

NOTES AND COMMENTS.

An Improved Method of Treating Skin Affections.

Though not new to dermatologists, yet the general profession are not familiar with the method of applying treatment to skin diseases, about

which Dr. P. Albert Morrow writes in the *Medical Record*, March 1, 1884:

The method consists essentially in the application of medicinal substances to the skin in the form of fixed, adhesive preparations. Its object is to confine the application of the drug to the diseased surface alone, and to secure its continued action by maintaining it in prolonged contact with the tissues by means of a practically immovable dressing.

For the attainment of this object a number of procedures have been employed:

1. Applying the drug in the form of a powder or paste, and retaining it in position by means of a protective coating formed by a layer of collodion or a piece of gutta-percha tissue.

2. By an admixture of the drug with a gelatine mass, which is painted over the surface, forming a thin adherent layer, with the addition of glycerine to render it soft and pliable.

3. By the application of a thin layer of collodion or gutta-percha solution, holding the drug in liquid suspension.

4. By incorporating the drug with adhesive plaster muslins, the basis of which is gutta-percha, which are cut into convenient shape so as to admit of accurate adjustment to the affected surface.

It may, perhaps, be considered premature to pronounce positively upon the merits of these preparations, or to decide closely their range of therapeutic application; yet a careful study of the results of their use in the hands of others, supplemented by his own experience, justifies Dr. Morrow in formulating the following conclusions:

That the introduction of fixed, adhesive applications in the treatment of certain forms of skin affections, marks a veritable advance in cutaneous therapeutics.

That they are admirably adapted for the employment of certain powerful stimulating drugs recently introduced into dermatological practice, as well as other standard drugs.

That they constitute the most effective mode of applying drugs in certain pathological conditions characterized by hyperæmia of the derma with inflammatory overgrowth of the epithelial elements, as in psoriasis and dry, scaly eczema.

In conditions characterized by hyperplasia of the cuticle, as in callosities, corns, and overgrowths of thickened, hardened epidermis, etc.

In conditions of capillary congestions of a passive character, as in acne rosacea, chronic erythema, etc.

In certain neurotic conditions, not only in essen-

tially pruriginous diseases, as prurigo, but in the pruritus symptomatic of other affections.

In circumscribed lesions generally, as *tinea circinata*, *tinea capitis*, *eczema marginatum*, *chromophytosis*, syphilitic scleroses, lupus, and, possibly, epithelioma.

Sacrache and Back-Ache.

In the course of some interesting lectures by Dr. J. Mathews Duncan, in the *London Medical Times*, we note the following, which is possessed of practical interest:

There is no more common, and therefore no more important, symptom of uterine disease, and especially of disease of the neck of the womb, than sacrache. The pain is dull, or an ache rather than pain: it is situated at or near the base of the sacrum; and, referring to it, the patient puts her hand to the part. I say with emphasis "at or near," and it is desirable to make this more definite. A pain below the middle of the sacrum is not at or near, and a pain above the middle of the lumbar spine is not "at or near." Such pains and aches do not point to the womb as the characteristic sacrache does; but the characteristic sacrache only points in that direction: it is not in itself nearly sufficient, not even strong, evidence of disease of the womb. Occurring in a virgin it would not, alone, unless very severe and inveterate, lead you to make an actual examination of the womb.

Other back-aches, that is pains in other regions of the back, not the sacrache, may accompany uterine disease, but do not point to the womb, are not symptoms rationally held as indicating womb disease. Unfortunately women are, at present, so under the influence of bad medical instruction, that they regard all pains in the back, from the occiput to the coccyx, as nearly sure indication of uterine mischief, and demanding uterine treatment.

The sacrache of womb disease may be constant, but generally it comes and goes. Frequently it is dispelled by lying, is felt on going to bed, and has disappeared before morning, and long standing makes it reach its highest pitch. When it is otherwise, that is when the ache is worse in the morning before getting out of bed, or is relieved by walking, then it is certainly not uterine.

I have said that you must not regard all sacraches or other back aches as uterine. They are common in men and in women. A weakly woman, who attends to all her pains, can do no standing or walking without back-ache, and often it is a sacrache; especially, if she has a long back, will she suffer in this way.

The pains liable to be confused with real sacrache are all in the lower back, about the lumbar spine: it is only such that might mislead any rational physician. Regarding them you will get some light from noticing the causes of the same pains in men. Now I find that weakly men are liable to these aches, sacral or lumbar, on walking or standing; and in many they are produced by excessive venereal indulgence.

Alcoholic Leg-Pains.

In the *Brit. Med. Jour.*, Dr. T. Clifford Allbutt writes:

"In the *Journal* of January 26, I observe a letter from 'Quærens,' who asks concerning 'tibial pains' in a hard drinker. These pains are so characteristic and so often met with, that I feel surprise that they have received but little attention. Indeed, I cannot call to mind any description of them in medical literature, nor do I find that my medical friends know much of them. These pains are commoner in women than in men; they are often tibial in distribution, but occur also often about the ankles and feet. They are usually associated with marked cutaneous hyperæsthesia. I have diagnosed in women many a case of secret drinking by these pains alone. Indeed, if a woman were found to complain bitterly of pains in the legs below the knees, pains somewhat nocturnal in occurrence, and as severe as those of syphilitic periostitis; if she resented any free handling of the limbs; if, again, she lay with legs adducted, extended, and with the feet pointed, much as in lateral sclerosis, but without permanent rigidity; if for all this outcry there were no visible cause whatever, the tibiæ smooth, and no more sign of spinal disease than perhaps a slight ankle-clonus, then I should, almost without hesitation, infer that alcohol was the cause. As 'Quærens' finds, the pains cannot readily be eased, and can be cured only by time, with abstinence. In his case, I suspect the cause is still in operation. For my own part, I tell my patient how he is to promote his own cure, and am not sorry to use the pains as an argument for abstinence. I feel little doubt that the cause of them lies in the irritation of the spinal cord or its membranes."

Dr. A. is an authority, but the question suggests itself to us, whether these pains are not really syphilitic in character. We do not mean to say that all hard drinkers are syphilitic, but we do believe that the majority of syphilitics are hard drinkers. A sober man is usually careful about sexual intercourse, while if the question were put to all

syphilitics, we feel that the greater proportion would answer that the intercourse from which they contracted the disease was indulged in when drunk and irresponsible. Having become syphilitized, the spirits are naturally much depressed, and, in many cases, spirits are poured down to keep the spirits up. Again, it is well known that alcohol has a tendency to exaggerate the symptoms of syphilis, no doubt by its depressing influence on the general system. In this last fact may possibly be found an explanation of the fact that the pains were cured by abstinence.

The Pathology of Puerperal Fever.

When Dr. C. C. Lee (New York Pathological Society) says that a woman died of "unmistakable puerperal fever," one is inclined to ask, what is "puerperal fever?" in view of the diversity of opinion on the subject which recent discussions in New York have brought forth. Puerperal fever is a very safe expression, because in all these cases there is undoubtedly fever, and since this fever occurs in a puerperal woman, it must perforce be *puerperal fever*, no matter what the cause may be. The specimens which Dr. Lee presented argue strongly in favor of the view that puerperal fever is due to puerperal *septicæmia*, whether the *septicæmia* be due to the entrance of disease germs from without or to the results of decomposition of placental fragments and blood-clots that have been retained in an imperfectly involuted uterus—which latter view receives the sanction of Professor Parvin to a certain extent, who seems to believe that the placental and blood-clot debris furnish nourishment to the germs from without. The italicized words (our own italics) that follow will make this view clear.

Examination of the abdomen only was allowed. The intestines were distended with gas. The peritoneum was cloudy and covered with a pellicle of fibrin and pus, best seen where the coils of intestine came in contact. There was a small amount of sero-purulent fluid within the peritoneal cavity. The stomach was enormously distended with gas. The uterus was partially involuted. There were no adhesions. The outer surface of the organ was pale. There was no exudation upon it. There was no evidence of cellulitis. The uterus was opened on the anterior, and the interior was found to contain dirty brown granular matter, irregularly heaped up, the greatest thickness being about one-eighth of an inch. The odor was offensive, although not strictly fetid. These pulpy masses seemed to be from broken-down clots. No fibres were found, and they were easily washed away. *Inflammatory*

products, pus and fibrin, in small amount, thinly scattered over the whole of the inner surface, more especially in the lower half. The kidneys exhibited no evidence of pathological change.

Suspended Animation.

A very interesting theological question is raised by the following case reported by Dr. W. Augustus Norry in the *Brit. Med. Jour.*, January 26, 1884:

I was called to attend A. B., a primipara, who was stated to be in the seventh month of pregnancy. I found the os slightly dilated, and labor commenced. About eight hours afterwards, the patient was delivered of a seven months' female child. When born, the child was apparently dead. Artificial respiration was performed, the heart then feebly pulsating; cold and hot baths, with slight blood-letting from the umbilical cord, were also tried. This produced one or two gasps, but the limbs became cold, and the heart's action stopped. After half to three-quarters of an hour had been spent in fruitless endeavors to restore animation, the child was given to the nurse as dead, and placed in a flannel. It lay there for about two hours. When the nurse went to move it to a proper place, she observed it give a gasp, whereupon she put it into a warm bath; and after a while its color and the heart's pulsations returned. It lived about fifteen hours.

The point of interest to a general practitioner from this case is the question, How long should an attempt to restore life be made?—as to a busy man it must of necessity be a very material point whether he has to stay half an hour or two hours after the heart and respiration have both stopped. On the other hand, a life is at stake, and the interest of that young life must be duly considered.

If in similar cases the child is regarded as dead, and no efforts made to resuscitate, what will be the future condition of that child?—for in such a case a living being has died without baptism!

Sea Voyaging.

We are so accustomed to recommend a sea voyage to a patient whom we are not able otherwise to benefit, that it has become a therapeutic routine, and we rarely hesitate to consider the appropriateness of our recommendation. In the *Lancet*, February 23, Dr. Farquhar publishes a paper on Sea Change, the Effects of Voyaging, with cases. He remarks on the paucity of information on this subject, Dr. Faber being the only observer who

had gone to work systematically. Dr. Farquhar's observations on a voyage last winter up the Mediterranean led him to the belief that many unsuitable cases are sent a-voyaging by medical men; and in the event of such a rigorous winter as that of last year, even in Italy and Greece, the disappointment to invalids in search of health must be great. He then gives details of the various cases that came under his care and observation. The most pronounced benefit was obtained by most of the phthisical cases, but some left the steamer before the tonic and stimulating action of the sea air had made itself felt, unnerved by the hardships endured in a storm experienced on leaving the Mersey. Voyagers suffering from the effects of overwork and mental strain did well; but "specific" cases showed the most marvellous results, complete recovery being the rule. Dyspeptics did not do well, nor subjects of skin disease of a nervous origin. To sum up, his experience in this voyage led him to believe that no diseased condition where the nervous, irritable element was present had much chance of benefit: the sea-air stimulus was in the end too powerful through its constancy. Such cases should land after the first beneficial stimulation, which generally occurred within the first three or four weeks of the voyage.

Confinement vs. Consumption.

We all know that fresh air and consumption are very antagonistic, and as affording additional evidence of this, the observations of Dr. Baer, chief medical officer at the Plötzensee Prison, near Berlin, have demonstrated the fact that the mortality in the State prisons for the three years 1878 to 1880, represented an annual death-rate of 30.6 per thousand. In describing the general results of his experience, in the *Zeitschrift für Klinische Medicin*, he alludes to the fact that previous to the improvement in prison arrangements, which was brought about early in the present century, malignant typhus, gaol fever, and small-pox, decimated the inmates of such establishments. At a later period, when, notwithstanding the advances made in the direction of reform, prisoners were kept in unhealthy cells, and were fed insufficiently as well as injudiciously, scorbutic affections and diarrhoea became frequent. Now that in most instances the arrangement of prisons is in accordance with sanitary requirements, it would seem that consumption has taken a leading position amongst the recorded causes of mortality. Various statistics as to the last fifty years are quoted by Dr. Baer in confirmation of these assertions.

As to the institution under the care of Dr. Baer, it would appear that between 1873 and 1882 only $6\frac{1}{2}$ per cent. of the deaths were attributed to consumption, but out of 112 cases in which prisoners were discharged upon medical grounds, 45 were suffering from the disease in various stages. As to the disease being brought on by confinement in prison, Dr. Baer considers this is proved by the facts that the greatest mortality is traced to the second and third years of captivity, and that persons in solitary confinement have been found to be frequently attacked by the disease in question.

Near-sighted Children.

At a recent discussion in England on the growing frequency of myopia in schools, one of the speakers mentioned the importance of any improvements that would keep the scholar's eye at a good distance from his task. The ordinary slates in common use have long been felt to be unsatisfactory, on account of the little contrast between their surfaces and the markings of the pencil, and which was rendered even less when the slate had become greasy. Allusion was made to the greater contrast of pen and ink marks on white paper, and to the experiments in schools at Zurich, under Professor Horner, where ink and paper were adopted in preference to slates. Cohn, of Breslau, had, however, devised white composition slates. An ordinary lead, or a specially used black pencil, was employed. Other marks were easily erased. Reference was briefly made also to the printing of school books, and to the very valuable and interesting articles in the *Annales d'Oculistique* some time since on the "Physiology of Reading," by Javal. This observer has made the important discovery that on reading the eye runs along the upper part of a line, and see it more clearly than the lower half. Examples of printing illustrating this were shown, and the explanation by Javal was mentioned, as well as the hints this observer drew from this fact for the formation of type.

Hyperosmic Acid for Neuralgia.

From the *Med. Record* we learn that a one per cent. solution of this drug has been used subcutaneously. It has been employed in Billroth's clinic in a few cases. One of the patients had been a martyr to sciatica for years, and had tried innumerable remedies, including the application of electricity no fewer than 200 times, while for a whole year he had adopted vegetarianism. Billroth injected the above remedy between the tuber ischii and trochanter, and within a day or two

the pain was greatly relieved, and eventually quite disappeared. It would be rash to conclude too much from these results, in the face of the intractability of neuralgia to medication; but if it really prove to be as efficacious as considered, hyperosmic acid will be a therapeutic agent of no mean value.

A Caution about Jequirity.

After reporting a case of sloughing of the cornea after the use of jequirity, in the *Weekly Medical Review*, February 23, 1884, Dr. S. Pollak formulates as follows:

1. Jequirity is by far the best remedy which has been hitherto used for trachoma and pannus.

2. It does all, and more speedily, that has ever been claimed for purulent inoculation, minus the repulsiveness of the last remedy.

3. The infusion of jequirity must be used only when perfectly fresh. After four or five days it swarms with bacteria, when the danger of their entering the tissue and causing a septic state is very great.

4. Sterilizing the infusion requires much care and labor, and may not always be practicable. It will doubtless retard the decomposition, but it will not prevent it entirely.

5. The full therapeutic utility of jequirity will only be attained when chemistry shall have succeeded in preparing an alkaloid of it, which will keep, and the strength of it is properly known.

Calcification of the Pleura Costalis.

As evidencing how wonderful may be the morbid processes going on within the body, we note the following from the *Brit. Med. Jour.*, January 26, 1884: At the *post mortem* examination of a man who had died of cancer of the stomach, at the Hôpital St. Antoine, M. Gilbert found a thick plate of bone-like material covering the internal surface of the ribs on the right side, from the sternum to the vertebral column. This plate measured 12 centimetres in height, and 20 in breadth. Its external surface was smooth, and separated from the ribs by connective tissue, while the internal was rough, and adherent in some places to the lung. Chemically, the plate had very nearly the same composition as bone, but the microscopical examination showed that it was only fibrous tissue loaded with lime-salts.

Bert on Chloroformization.

A foreign exchange notes that M. Bert promises to arrive at a method of administering chloroform

mixed with oil, which will render the use of an apparatus unnecessary, but will yet be superior to that which consists in the application of a compress, saturated or moistened with the anæsthetic administered. He observes that it is barely possible that country practitioners who are only occasionally called upon to use chloroform, can purchase an instrument costing \$40, and keep it in order. Therefore, at a future meeting of the Biological Society, he will describe a method he calls *procédé de campagne* (country method), in contradistinction to the *procédé de ville* (town apparatus), when an apparatus is used.

Woman's Place in Nature.

If the result of the highest vitality is the most perfect product, we can scarcely refuse to the female the advantage over the male. It appears to be a well-established fact that an important source of sexual determination is nutritive as far as ovum development is concerned: that is, when the force becomes partially exhausted, the result is the production of males; when the ovum is in the maximum of sexual potency, then the production is invariably females. Does not this seem to indicate that there is something finer, subtler, more perfect, in the organization of woman?

Modern Operations for Cataract.

Mr. Brudenell Carter thus tersely summarizes his three lectures on this subject: They showed that the performance of iridectomy as a preliminary operation, and the subsequent employment of a comparatively small section through the tunics of the eye, have combined to render the extraction of cataract a more simple, and hence a more frequently successful operation than it has been at any previous period, and that these improved methods now enable surgeons to deal with the disease at a comparatively early period of its history.

For Flesh Worms.

Hager's Pharm. Cent., December 27, 1883, has the following:

Sixty-five grammes pure kaolin, fifty grammes glycerine, and thirty-three grammes dilute acetic acid, well mixed and formed into a paste and applied upon parts afflicted before retiring to bed, and left until next morning. The following evening rub parts at first gently with levigated pumice-stone upon flannel, and then increase friction. This treatment is continued alternately, one evening with paste and the next with pumice, until the flesh-worms have disappeared.

CORRESPONDENCE.

Answer to Gynæcological Queries.

EDS. MED. AND SURG. REPORTER:—

"Medica's" query No. 1 in your valuable journal, February 23, gives the symptoms that if varied in some cases would describe the condition of many patients that fall into the hands of physicians; and, like M.'s patient, they generally pass through the hands of all the doctors within their reach, with but little or no improvement. I have reference to the rural practitioner. Of course there are specialists in the larger cities whose experience and facilities enable them to relieve promptly and permanently a large majority of patients similar to the one under consideration; but unfortunately it is not possible for the greater portion of suffering women to avail themselves of the skill of the specialist, hence there is the great mass that must depend on the skill of the country practitioner for their health and happiness, and it is for the benefit of this class I call the attention of the reader.

That the treatment of this class of patients as practiced by the rural doctors is unsatisfactory, I do not think there can be any doubt; and, like M., there are, perhaps, many of your readers that would like to have a substitute for the disagreeable and inefficient astringent injections, which, in my hands, have proved an utter failure in a large majority of cases—and I know of other physicians whose experience has been similar to my own.

If one hundred readers of the REPORTER would suggest a course of treatment for M.'s patient, I do not suppose that there would be any two that would recommend the same throughout; but M. might select out of these such as he thought appropriate to his patient's condition, and effect a cure. We select our treatment largely from the combined experience of others, varied according to our judgment to suit the different conditions of our patients; and the principal feature in a man's success in the treatment of disease is his ability in applying remedies suitable to remove the cause and counteract the destructive tendency of diseases. It may be that many of the readers of this valuable journal cannot avail themselves of very many medical writers on this special subject, hence I suggest that many replies to query No. 1 might prove of much interest to many readers, and result in much good to our suffering and hysterical patients.

If I were called upon to diagnose M.'s case, I should name the disease chronic metritis; but I would not treat the patient according to the name of the disease, but according to her condition. In this, as in all other local inflammations, the general health is affected differently; in fact, we will scarcely find two patients presenting the same symptoms; hence it will appear that the treatment should vary accordingly.

M.'s patient is anæmic, which probably is due to derangement of the digestive organs; if there is irritation I would proscribe all stimulants in the form of food or medicine, and give such remedies as have a tendency to allay irritation and promote digestion. Zinc ferri chlorid. will prove

useful as an astringent and tonic. Fluid ext. gentian, ergot, hydrastis can., ipecacuanha (in small doses), and the mineral acids, I have found to give best satisfaction in this condition. But there may be a condition of the digestive system quite opposite to that of irritation; there may be atony, the mucous membrane may be pallid, relaxed and flabby, denoting general torpidity; wherein I would recommend such remedies as have a tendency to stimulate the action of the organic nervous system, such as nux vomica, quinine, etc. The elixir of calisaya and strychnia and iron, will be found an agreeable and efficient tonic in this condition. Constipation is a very common complication, and to remedy it I have found nothing better than three drops of fl. ex. belladonna before going to bed. The effect is sometimes slow, but if continued, will prove sure.

The local treatment is of equal or more importance than the constitutional. M. informs us that there is a slightly retroverted uterus and enlarged os, and that there is leucorrhœa.

I would expose the os with a bivalve speculum, touch the ulcers with nitrate of silver, replace the uterus carefully with a sound, then fill the vagina with a tampon of absorbent cotton, previously well saturated with glycerole of tannin, one drachm to the ounce of glycerine—in a manner that tends to maintain the normal position of the uterus. The patient should be directed to remove the application after it has remained thirty-six hours, by means of a small tape that should be fastened to the uppermost part of the cotton. She will experience no inconvenience from its presence except a constant fluid discharge, which she will look for anxiously if she is previously informed that it is the effect desired.

If an antiseptic is indicated, five per cent. of carbolic acid added to the glycerine mixture will prove useful. This should be repeated every third or fourth day until the ulcers and mucous discharge disappear, and then at intervals of one, two, and three weeks, until a cure is effected, which will probably require from three months to a year; in some cases longer. If the leucorrhœa proceeds from the uterus, I would apply Monsel's solution to the uterine mucous membrane, by means of lint wound on the end of a probe or sound.

Where there are neither versions nor flexions, the patient can effectually apply the vaginal tampon herself, and will find it much more efficient and agreeable than injections. But I would not discard the injections altogether; when used alternately with the above treatment, they will be found very useful in many cases. As an injection, I have found the following as good as anything I have tried:

R. Fluid ext. hydrastis Cand.,	3 ij.
Zinc. sulph.,	gr. xx.
Morphia sulph.,	gr. x.
Acid carbolic,	ij.
Acacia, pulv.,	ssj.
Aqua,	3 ij.

M.

The consistency of this mixture is an advantage in retaining it in contact with the mucous membrane.

I have used suppositories of sulph. zinc., alum, etc., but my experience with them does not justify me in recommending their use. There are many

other remedies and appliances that may be equal or more beneficial than those mentioned. I have only mentioned those that have proved most beneficial in my hands. I hope to see in your columns better plans of treatment than the one I have suggested; yet I hope that what I have written will shed a ray of light in the mind of some one where there has been darkness.

Mt. Sterling, Ky.

J. H. MOORE, M. D.

Uterine Disease.

EDS. MED. AND SURG. REPORTER :—

The case described by "MEDICA" in your issue of February 23d, is a type of many which have come under my notice for some years past. The accident whilst driving may or may not have had something to do with her uterine trouble. I would suggest—

First. Discontinue *all* internal medication for at least thirty days. Let her diet be light and unstimulating, such as cracked wheat with good cream for breakfast, with cocoa, if she can digest that, or if not, an orange or two half an hour before the meal in lieu of the cocoa. For dinner, strong concentrated soup, varied daily, with such fruit as she may relish and easily digest. For supper, either weak tea or milk, with mush boiled, of corn or oatmeal, and stewed fruits, toast, bran-crackers, or soda-biscuits; at each meal. To this add gentle massage of the entire body both morning and evening, on rising and retiring, by a member of her family, who can be taught the method in one sitting if ordinarily intelligent. The doctor must now manage the rest. Apply daily a galvanic current of fifteen or twenty cells, as follows: the positive over the solar plexus; the negative on the genito-spinal centre. The current should be stable and uninterrupted; the duration half an hour. Morning is the best time for the application. General faradization succeeding the galvanism is also of value, but is not absolutely necessary. In two or three weeks this course will develop both appetite and strength, and at the end of a month the potassio-tartrate of iron, with Fowler's solution, is advisable.

As amenorrhoea is simply a symptom, it need not be directly treated; the probability is that her neurasthenic condition being relieved, menstruation will voluntarily recur. If it does not, then I venture to suggest that as there is no such thing as an emmenagogue *per se* except electricity, the application of static currents directly to the utero-ovarian system is indicated. The method I adopt is described in other places.* To the cervix might be applied, by painting it thoroughly outside and up to the os internum, the following, once or twice a week:

R.	Acid tannic,	
	Acid carbolie cryst.,	
	Iodine resublimat.,	
	Potassa iodidi,	aa ʒj.
	Glycerine,	f ʒ ij.
	Tr. iodini,	f ʒ ij.
M.	Sig.—Apply as directed.	

*What is Wrong with our Emmenagogues?" Therapeutic Gazette, November, 1882, p. 403.

MEDICAL AND SURGICAL REPORTER, November 28, 1874, case 3, p. 422.

Medical Bulletin, vol. iv., p. 88.

Second. Injections per vaginam are of little value in any case, as they act for a limited time, and are carelessly given as a rule. Suppositories are dirty, and the greasy adjuvant or vehicle destroys frequently any therapeutic value. Roll a long or short cotton tampon loosely, soak it in the selected astringent (properly diluted if strong or escharotic), and insert it at bedtime, withdrawing it by an attached string in the morning. It may, if necessary, be also used through the day. A napkin will prevent soiling the clothing, and the *whole effect* will be thus obtained *persistently* of any agent employed. This method I always employ; it is cleanly, simple, and thoroughly efficacious.

WM. R. D. BLACKWOOD, M. D.,

Neurologist and Electrician Presbyterian Hospital; Physician St. Mary's Hospital, Philadelphia.

No. 246 North Twentieth street.

NEWS AND MISCELLANY.

How Smallpox may be Spread.

The following incident that is recorded in the *British Medical Journal*, January 26, 1883, is interesting so far as it evidences the interest that England is taking in hygiene, and serves as a good example for us to follow:

"A newspaper vendor residing in Old Ford Road was summoned before Mr. Lushington, at the Thames Police Court, for sending out a large quantity of newspapers to his customers after he had been warned not to do so by the inspector of nuisances. The medical officer of health, at the hearing of the case, stated that, as the daughter of the defendant was suffering from smallpox in a room opening into the shop, and as the room-door was open, and the vendor came out of the room into the shop, he had no doubt the papers removed were liable to infection from the disease. The defendant was fined \$25 and costs, and was locked up in default. This is a very important decision, as considerable doubt has been expressed as to paper coming within the meaning of the section, and whether or not papers or books can convey infection. Many sanitarians doubt if letters sent by post, or books returned from smallpox patients, can convey infection; but as to the latter, there are cases on record to show that they can. Infection was, however, conveyed from this house into the adjoining parish of Hackney by the removal of a family residing in an upstairs room, one of whom was attacked with the disease fifteen days after taking up her new residence. This case shows the necessity for strictly forbidding children going to school from infected houses, as there was not, so far as could be ascertained, any personal communication between the sick and healthy."

International Medical College.

There is good prospect that the next International Medical Congress—which, as our readers may remember, will be held at Copenhagen, beginning August 10 next—will be a grand success.

Many valuable communications have been promised, and nearly four hundred non-Scandinavian colleagues have already announced their intention to attend. From France, amongst others, come Pasteur, Paul Bert, Ranvier, Charcot, Verneuil, Cornil, Hayem, Malassez, Chauveau, Ollier, Tripier, Lepin. From Italy—Bisozero, Mossa, Galgi, Peromoto, Novaro, Reymond, Giacomo, Baccelli, Tomasi-Crudeli. From Holland—Donders, Guye, Engelmann, Heinsius. From Germany—Virchow, Ludwig, Esmarch, Volkmann, His, Braune, Kronecker, Munk, Kühne, Heidenhain, Vogt, Bernstein, Grohe. The most eminent medical men of Sweden and Norway have become members of the various committees of organization.

Anti-vivisection in Germany.

In Germany, as elsewhere, the false sentimentality which would obstruct science by preventing vivisection has been active. The official, however, to whom the matter was referred has had the good sense to permit science to draw its own boundaries, and to say how far research by experiment is necessary. Applying to one celebrated professor of physiology for information, the gentleman gave his answer in a sufficiently concise and striking manner. Taking up the last edition of Hermann's "Hand-book of Physiology," he struck his pen through all those parts of the work that were based on experimental research or in any way indebted to it. The result was that not more than one-fourth of the book remained uninjured! The lesson was not taught in vain, and the important result given above may be due in great measure to the great aptitude for teaching thus shown by the distinguished professor.

Healing by Faith.

The *Lancet* tells us that a remarkable instance of this kind is reported in England, where a girl, who had been suffering from paralysis of the neck for twenty months, and unable to raise her head from the pillow, was suddenly healed, sat up in bed without any assistance, and has since been dressed and able to walk about. This instantaneous effect was produced during the prayers of some Blue-ribbon friends, and has created a sensation among the lovers of the marvellous in the district where the patient resides. It is difficult to convince the unlearned that supernatural agencies are not necessary to bring about results of this character, and that more wonderful instances of the influence of a superior will, or appeals to the senses of highly excitable or sensitive invalids, have been recorded as testimony of scientific laws now well recognized and known.

To Cure Diseased Plants.

M. Villermoz, a celebrated French horticulturist, recommends the watering of diseased plants with warm water, after having previously turned up the earth, without touching the roots. The water that escapes from the bottom of the flower-pot is at first clear, but it afterwards becomes lightly brown and yields an acid reaction, to which M. Villermoz attributes the diseased condition of plants, the hot water acting not only as a

stimulant, but possessing the power of eliminating the acid substances with which the soil becomes impregnated. By this treatment M. Villermoz has seen almost completely withered plants restored to life in a short time, and he thinks that the same may be applied to plants in the open air.

Extraction of Teeth without Pain.

At the Paris Société de Biologie M. Paul Bert introduced to his colleagues a method recently discovered by a Geneva dentist for extraction of teeth without pain. The method is very simple, and can be used by the most ignorant; it consists of a piece of India rubber through which a hole has been made to receive the crown of the tooth, pressed down tightly in the gums and left *in situ*. By the heat of the mouth the elastic contracts, and by that operation the tooth is loosened in its alveoli, and finally is lifted completely out of its bed to the relief of the patient. It takes four or five days to effect its purpose. Any improvised piece of caoutchouc would do.

Prize Essay on Criminal Anthropology.

La Rivista di Discipline Carcerarie offers a prize of 2,000 lire (\$400) for the best essay "to exhibit the progress made in the present century (in Italy and elsewhere) in the study of criminal anthropology, and the theories upheld by the most competent writers; to examine the facts and statistical figures adduced in support of such theories, and to compare them or to combat them with other facts and with other statistics." The prize is open to all comers. The essays must be written either in French or in Italian, and must be sent to the *Direzione della Rivista di Discipline Carcerarie* not later than December 31, 1884.

The Hygiene of Children.

As affording us a good example, we are pleased to note that with a view to the discussion of questions of school hygiene, periods of study, gymnastic training, prevention of disease, and allied questions connected with growing boys and girls, it is proposed in England to form a society of medical officers of public, charitable, and general schools. At the meeting of this society papers on these important questions would be read and discussed, and the experience gained in the various institutions collected for the general good.

Items.

—It gives an idea how London grows that in a single week in February the births exceeded the deaths by 1,215. The death rate that week was only 19.5 per 1,000.

—Carl Jensen, of Philadelphia, has instituted suits to recover damages from manufacturers infringing his patent process for manufacturing "Crystal Pepsin."

—A singular accident happened lately at a mill in Nashville, Tenn. A workman was thrown towards a circular saw, and, thinking he would strike it, died from fright. When picked up he was dead, but there was no sign of a bruise on his body.

—London journals report the deaths of two medical men from suicide. One was discouraged at the difficulties in getting practice, and the other had been accused of procuring abortion.

—Dr. Price, the aged Welsh Druid who recently attempted to dispose of the body of his infant child by burning it, has been tried and acquitted. The justice, in addressing the jury, said he had been unable to find any law forbidding cremation.

—Prince Ferdinand, of Bavaria, brother-in-law of the Duke of Genoa, having published a work with the title "The Anatomy of the Tongue, and Studies in Comparative Anatomy," has received from the University of Munich the honorary degree of Doctor of Medicine.

—In April next, Professor Frerichs will have completed twenty-five years of service as Director of the Medical Clinic in Berlin. It is intended to celebrate the occasion by a public festival; and a committee, consisting of Professors Bardeleben, Laner, Leyden, and others has been formed to carry out the object. A marble bust of Frerichs will be unveiled on the occasion.

—Vomacka gives the following directions for the preparation of a substitute for blue ointment, which also keeps better: One part of soft and perfectly neutral potash soap is mixed with a little glycerine in a glass mortar, and one part of mercury is added with constant trituration. When no globules of mercury are any longer visible, add two parts more of potash soap to make four parts. It may be scented with lavender or other essential oil.

OBITUARY NOTICES.

LUNSFORD P. YANDELL.

Dr. Lunsford P. Yandell died suddenly March 12th, from Neuralgia of the heart. Dr. Yandell was, at the time of his death, the editor of the *Louisville Medical News*, and was a physician of extensive reputation both as a contributor to the literature of the profession and as a successful and active practitioner. He was 47 years of age.

GEORGE ENGELMANN.

At St. Louis, March 4th, Dr. George Engelmann. Dr. Engelmann was born at Frankfort-on-the-Main, Germany, February 2, 1809, and was consequently, at his death, seventy-five years and two days of age. His university education was acquired at the universities of Berlin, Heidelberg, and Wurzburg. In 1832 he came to the United States, and three years after setting foot upon the eastern shore of the country, he found himself in St. Louis, in the heart of the country. There he began the practice of medicine, and continued the study of it and other sciences. In the year 1839 was founded the Western Academy of Science, Dr. Engelmann being one of the organizers. For a number of years the society flourished, and then died. He was one of the originators of the St. Louis Medical Society, and was for some time the president of that body. In 1856 the St. Louis Academy of Science was organized, and he was one of the founders, and for many years held the honorable position of president. His son is a well known gynecologist.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

On reading the few lines on Dr. Rezin Thompson in the *REPORTER* of March 8, I will add my mite—not biographical, but professional, for of the former I know nothing.

Although it has been several years ago, I remember well his strong advocacy of oil of sassafras in the treatment of zymotic diseases, and that his theory of its therapy was based upon his idea that all continued fevers were caused by the admission of germs into the system, and because he found the oil of sassafras was a powerful insecticide. I have heard physicians who were personally and professionally acquainted with him say he was wonderfully successful in treating typhoid fever.

I cannot call to memory now his formula for making his fever syrup, but do remember that oil of sassafras and the expressed juice of the green peach leaves were two of the most important, in his estimation. It is my impression rhubarb and carb. soda were the other ingredients.

I have little doubt that Prof. W. L. Nichol, of the Medical Department of Vanderbilt University, Nashville, can give you further information, and I hope he will. Dr. Thompson was a very eccentric man, but a fine physician, a liberal and independent thinker. His therapy was based upon the germ theory of disease, and most likely he was the first to publish such views. Respectfully,

S. W. CALDWELL, M. D.

Trenton, Tenn.

Asthma.

EDS. MED. AND SURG. REP.—

I noticed in a late number of the *REPORTER* a request for the treatment of asthma which had been found most satisfactory. In the course of a long practice, I have treated several cases of asthma, and have derived benefit from iod. potass., which, indeed, is the medicine in which I placed most confidence until employing *grindelia robusta*; this I have used in but two cases, but with benefit in both. Indeed, in the last case in which I have used it (formerly treated by iod. potass.), the patient is loud in his praises of the remedy, which he declares has done him more good than anything else he has ever taken.

Wishing to satisfy myself as to its effects, I gave it uncombined, but think it quite possible that there might be an advantage in combining other medicines with it, according to the original recommendation of Dr. Gibbons, of California.

A lady, a former resident of our county, is so affected with asthma when in this State that she resides most of the time in Colorado, where she finds immunity from her troublesome complaint.

I might add that believing in the positive treatment of all diseases that require anything more than "good nursing," I have given the *grindelia* in full doses.

B. HINCHMAN, M. D.

MARRIAGES.

BLACKBURN—REYNOLDS.—At Fayetteville, Arkansas, March 5, 1884, by Rev. H. M. Welch, Thomas W. Blackburn, M. D., of Boonsboro, Ark., to Jennie, daughter of Col. John T. Reynolds. No cards.

DEATHS.

GILFILLAN.—At his residence, in West Alexander, Pa., Dr. William Gilfillan, aged sixty-five years.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

THE UNKNOWN FACTOR IN THE EQUATION OF THE NERVOUS SYSTEM.

BY J. M'F. GASTON, M. D.,
Of Atlanta, Georgia.

(Continued from page 361.)

It is not supposed that the use of medicines by the mouth can be entirely substituted by other modes of introducing them into the system. In all cases that may be appropriate for propagating the best effect of medicinal agents through the stomach, of course this channel should be adopted. Yet there are numerous instances in which embarrassment is presented in the repugnance to swallowing medicines, or in the inability to retain them; while there are many cases in which medication through other channels is attended with more satisfactory results in the treatment of the disease. The hypodermic method is better adapted generally to acute diseases, and yet should not be confined exclusively to this class of derangements, as there are chronic cases that require this kind of treatment.

The advantages of medicated injections upon the organism are manifested, not only when made into the areolar and cellular tissues, but also when passed into the substance of glands and tumors, into mucous and serous cavities, and into the excavations of various abscesses. This depends upon a peripheral development of nerve energy, co-existent with the general distribution of the capillaries and the minute nerve fibrils to the cutaneous surface, and to the serous and mucous membrane, as likewise to the reticulated struc-

ture and cellular tissue, that become exposed in abscesses. The impressions upon these several parts are, to a great extent, independent of the brain and spinal marrow, and *yet are extended by a connecting link of the ganglionic nerves in such a way as to reflect a vital influence of the remedial agent back upon the respective structures.* There is abundant evidence of the close relations of the great nerve-centres with the cutaneous and other superficial structures, yet it is not known what is the exact line of communication from one to the other, nor through what channel the centripetal and centrifugal forces operate in propagating the impressions made upon the different classes of tissues. A precise understanding of the distinct relation of the nerve fibres to the capillaries, and their joint influence upon the nerve centres, and through them upon the various internal organs, is a desideratum for experimental physiology.

The subcutaneous areolar tissue is so intimately connected with the internal parts by the correlation of the capillaries and the nerve fibrils, as to afford a most important medium for the application of remedies. Their effects are manifested more speedily either by absorption or by direct action upon the nerves than is practicable through the stomach.

In the true language of Dr. H. C. Wood, "the subcutaneous tissue affords the most rapid route to the central organs;" and this line of approach to the citadel of life, requires more thorough research on the part of scientific men.

An explanation of "the action of medicine on the cure of diseases," must be sought in a primary impression through the capillaries upon the minute ramifications of the nerves, which is ex-

tended to the nerve-centres, and thence propagated by the joint influence of the ganglionic and spinal nerves to the whole vital organism. The immediate transmission of the venomous emanation from the bites of poisonous snakes and insects, cannot depend upon the comparatively slow process of passing through the ordinary route of the circulation, but results from the entrance of the poison through the network of capillaries and nerve fibrils, being transmitted from the former to the latter, and thence by the nerves to the nerve-centres, with the convergent derangements and disturbances of the animal economy. It may be that the antidotal influence of hartshorn, or other corrective, could be efficaciously applied through the same channel, and if an immediate resort to the subcutaneous syringe could neutralize the poison or its effect, it should be hailed as a grand advance in therapeutics. There is a peculiar result from the curari, that unlike the venom of snakes, does not occasion local inflammation when inserted into a wound, but appears to act exclusively on the nervous system. It manifests its effects in arresting the action of the lungs sooner than the pulsations of the heart, and hence creates a strong presumption against the operation of the poison by means of the general circulation, notwithstanding that it has access to the nerves through the medium of the blood in the capillaries. The influence of this powerful agent is so limited to the nervous system, that when the lungs cease to act, while the heart continues to beat, respiration may be maintained artificially until the otherwise fatal depression passes and restoration ensues. In the course of a few hours, the poison is dissipated and eliminated, and leaves the system in a condition to recuperate its natural powers by a return of nervous energy.

It may be deduced from the facts already known, that independent of any direct operation upon the nerves, the influence of traumatic poison is developed through the circulation of the blood upon the ganglionic system of nerves, and as a consequence, the implication of the pneumogastric nerve, which controls to a large extent the action of the lungs. Yet, this does not preclude the recognition of a primary and immediate action through the capillaries upon the correlated fibrils of the nerves, and the transmission thence of this influence; and the route followed in the introduction, progress, and elimination of such agents, requires to be more closely defined, indicating the source of the disorder to the animal economy. Outside of the residual influence exerted by external applications, we may note the

operation of accidental impressions from various sources upon the human system.

The transmission of cutaneous modifications to the internal organs, becomes in many instances a source of disorder to the animal economy. The contact of cold and moisture with limited portions of the surface of the body in an irregular or partial manner, interrupts the nerve power in such parts, and thereby interferes with the proper equilibrium of the circulation in a way to impair the dependent organism. Currents of air acting suddenly and locally on the surface of the chest, frequently induce pneumonia or pleurisy.

The liver becomes deranged by undue exposure to the sun and night air, from the influence of the alternations of temperature upon the skin.

The intestines and bladder are often affected from dampness of the feet and vicissitudes of the weather, operating upon the surface.

Rheumatism and neuralgia are the ordinary results of sudden atmospheric changes; and though the person may be exposed generally to the deleterious impression, certain parts are attacked, owing to a predisposition to such derangements in their tissues.

The exact line of operation in any of these impressions, by which the effect is produced upon the vital functions, cannot be clearly traced. Yet there are sufficient data upon which to base a very plausible solution of all the varied manifestations of this relation of the outer and inner parts in health and disease.

The medical profession are familiar with many facts that go to sustain the pervading modification of the organism through this connecting link of nerves, and the special nature of the cause is propagated in a peculiar way for the development of specific diseases in the varied structures of the body.

The absorption of any virus into the system, by contact with a delicate mucous surface, or by its introduction beneath the cuticle, develops subsequently the specific constitutional effects of the special contamination. As an instance, the syphilitic virus comes in contact with the delicate tissues of either sex, and its immediate and direct influence upon the part is not perceptible for the time being, but in the course of a definite period of incubation, it causes an ulcer upon the surface. Again, from this point, in the course of a variable period, there is transmitted throughout the organization a peculiar and distinct disorder, which indicates that this poison has been operating gradually, but surely, through some definite channel, to bring about this effect.

Here is a point for study, and presents some of the obscure points of my theory more distinctly than is shown by any other phase of the reciprocal relations between the surface and the interior structure of the body, with their dependencies.

We observe a peculiar process in the termination of the incubatory state by the primary ulcer of syphilis, and we further note its advances in the ultimate development of the secondary phenomena of this disease. This exhibits a class of results quite different from those previously adverted to, and experience affords other convincing proofs of the extraordinary vital link by which distant parts are associated.

In the simple operation of vaccination and its consequences, we have an illustration of the same principle. As in the case of the virus of syphilis, the vaccine lymph is brought into contact with the delicate tissue beneath the cuticle, and then appears to remain dormant for a definite period, when it is found to have been transmitted through a distinct channel to the general system. At the expiration of eight days, more or less, it develops a characteristic pustule at the point of introduction, accompanied by a corresponding constitutional excitement. It is not considered that the retention of the vaccine lymph for this period, causes a mere local influence upon the tissues. Those who have any claims to pathological knowledge, view this as simply a *punctum salicus*, from which a special disorder is propagated to the general system.

The pustular eruption at the point of introduction is only an evidence of its complete development, or a local manifestation of a constitutional disease, which by its pervading character exempts the subject from the access of variola in the future.

In this connection, attention may be drawn to the very extraordinary history of the varying conditions that characterize the latent period of the germ or virus of hydrophobia. An individual being bitten by a rabid dog, and no steps being taken to intercept the absorption of the poison, it should naturally be inferred that the consequent disturbance should present itself within some definite period. Yet, by some unaccountable modification of the dynamic element that operates in the propagation of poisons to the general system, it occurs that no calculation can be made as to the lapse of time in which the disorder may appear.

The condition consequent to the contamination is not localized, as it is notorious that any delay in excising the part bitten or in neutralizing the

effect on the tissues, is unavailing for the arrest of the evil.

The malady must, therefore, from the outset be in operation, and is gradually propagating its influence, according to its quality, through the organization.

There is positive evidence that an impression made through the areolar tissue, or even upon the delicate mucous membrane, finds ready access to the subcutaneous net-work of capillaries and nerve fibrils, leaving its effect on them.

This influence is transmitted in a definite and uniform manner, through a nervous channel to the central parts of the organization, so as to operate through the ganglionic system in developing the consequences that qualify the agent employed.

It may yet be ascertained that all these striking developments of structural disorder arise from some molecular change, that is to be corrected upon a large generalization of therapeutics.

It is incumbent upon the pathologist to afford a satisfactory exhibition of the mode in which the efficient cause of derangement brings about the consequent alterations in the functions of the various organs, so that we may be enabled to proceed understandingly in arresting the disorder.

It devolves also upon the physiologist to point out the modifications that may be impressed upon the nervous system, consistently with the normal tone of the healthy organism, and through what agencies and by what routes effects are produced. The propagation of nerve power from the spinal column, as exhibited in the voluntary movements of different parts, and the reception of impressions from without or within the body, depends upon the anterior and posterior branches of the nerves, which are classified as motory and sensory, according to their respective capacities. This important distinction in regard to the attributes of these two sets of nervous trunks is due to the investigations of Magendie, though it has been claimed for Sir Charles Bell up to a very recent period.

The relations of the nerve fibres in the different segments of the spinal cord, and their association and decussation in the medulla oblongata, have been demonstrated by Charcot in a satisfactory manner. They supply the requisites for the nice and varied conditions of action and re-action from the many impressions upon the sensory nerves. The most recent researches have assigned very complicated functions to the medulla oblongata; and these additions to our knowledge enable us to interpret more accurately the variations in the different regions of the cord, and in

the different columns, as modified by transmissions from the afferent and efferent nerves.

Those manifestations and exhibitions that are associated with the spinal cord in its reflex capacity, are not in any way identified with the phenomena which are developed by the reciprocal relations of the capillary plexus with the great sympathetic nerve. The sensations, with the voluntary and reflex movements, are not associated in the demonstration of these mutual dependents. It is to the organic system of nerves, and the nerve fibres intermingled with the capillaries, that we must look for an explanation of the effect of remedies, poisons, and other varied agencies, which operate through peripheral impressions upon the body.

The general division of the nerves into the cerebro-spinal and ganglionic systems, presents a satisfactory solution of most points connected with the performance of the animal and organic functions. A separate, if not an independent action on the part of the great sympathetic, admits of nutrition, secretion, and excretion, with the special acts of respiration and defecation, while the cerebro-spinal influence is interrupted by paralysis or other agencies of a temporary character. Yet the key to the vital casket needs to be given to the physician. An intelligent explanation of the sympathetic relations of the nerve fibrils and the capillaries, with the normal and systematic performance of the functions of the various parts of the human organization, on the part of the physiologist, will conduce greatly to a better understanding of the derangement of the vital operations by the pathologist. We need precise information in regard to the workings of these two divisions of minute structures, and I have sought in vain for any satisfactory solution of the recognized influence of the nerve-fibrils and the capillaries upon the vital functions.

(To be Continued.)

AN UNOBJECTIONABLE FORM FOR THE ADMINISTRATION OF MEDICINES.

BY M. S. FRENCH, M. D.,
Of Philadelphia.

Of all the various forms in which medicine is prescribed, there is none so well suited for the administration of drugs possessing a poisonous influence, unpleasant odor, or taste, as the manufactured pill form.

The advantages derived from prescribing remedies in this form are so apparent, that it was a matter of surprise to learn that their use was not

more general. It is on this account that I present this short article, hoping that it may lead to more extensive use and appreciation of this valuable method of prescribing.

Manufactured pills will become more popular with physicians, as their value and advantages are recognized. They are so beautiful in appearance, so accurately compounded, so quickly dispensed, reducing the danger of making a mistake, on the part of the physician or druggist, to an almost impossibility.

They also enable the physician to carry with him, in a small and compact form, ready for administration, all the remedies that might be needed in emergencies, and night practice.

To the physician engaged in country practice, where his patients are at a distance from a drug-store, they become of especial value.

In that class of pharmaceutical preparations which exhibits medicines in an elegant and palatable form, without the sacrifice of quality, uniformity or accuracy, American pharmacists have been doing excellent work, the result being that most of the objectionable features which formerly pertained to manufactured pills have been removed, being now produced in such a perfect and attractive form, that the most fastidious patient can find no objection to urge against their use.

There is little doubt but that much of the popularity of Hahnemann's system of cure, based upon the maxim *similia similibus curantur*, is due, not to the truth of the law, but to the preference for the tiny, tasteless and attractive pellets; and the sooner the medical profession recognizes this, the quicker will the public see that, aside from pleasant doses, there is nothing but fallacy and error in homeopathy.

There are some drugs used in practice that cannot be administered in pill form, and there are instances where solutions are preferable. Such is the case in treating the various types of fevers, and where tonics are employed; but in the greater number of cases, the object desired is a continued influence, rather than an immediate impression upon the system, and for the accomplishment of this end pills are best suited.

In an article of this nature, it is not necessary or possible to dwell upon all the conditions to which the administration of remedies in the manufactured pill form are applicable, but to detail a few of the more frequent diseases, and specify instances where they have been used with success, during the past six or seven years.

The physician engaged in city practice sees no departures from health so frequently, as those as-

sociated with the digestion and assimilation of food. A majority of the patients presenting themselves for treatment, suffer from either a simple dyspepsia or some one of its many manifestations. The life led by people massed together in large cities is such an artificial one, the inhabitants being so subjected to the enervating influences surrounding them, that the indiscretions of diet, mode of living, anxieties, and the continual struggle for existence, become active factors in producing the large number of dyspeptic cases.

There are certain conditions that cannot be relieved by dietetic and hygienic treatment alone, but require the use of drugs, which should be given in the most pleasant and unobjectionable form; as there is no class of patients so prone to find fault with their medicines, being best suited by doses that are attractive, tasteless and not bulky.

It will not be a digression to dwell upon the treatment of this common affection, as it will enable me to mention more particularly the remedies suited for administration in the form under consideration.

The power of digestion being depressed, special aids to that function will be found in pepsin or alkalies; the anæmic condition may require iron, quinine or strychnia. Where remedies are needed, the action of which must be sedative, good results may be obtained from bismuth, opium, belladonna, arsenic or silver.

A very useful pill is that of aloin (gr. $\frac{1}{8}$) and strychnia (gr. $\frac{1}{16}$) given at bedtime; this will produce a mild, thorough, laxative effect, unloading the stomach and intestines, removing the fetid breath, the furred coating upon the tongue, and the cerebral congestion.

An error liable to be committed is the administration of cathartics of too active a nature; they are rarely called for, do little good, and might possibly do evil. Mild laxatives only are required, and care should be exercised as to their selection and frequency.

Formerly it was my custom to use pepsin and pancreatine more than at present, as recent investigation has led me to believe that as much benefit can be derived from the former agent alone, as when given in combination with the latter. Pancreatine has been shown to be itself digested by pepsin, so that its chance of getting through the stomach to the duodenum, where it normally exerts its function, is very slight, while when combined with pepsin, it must be digested as soon as the mixture becomes warm enough, in or out of the stomach, to carry on the process. Yet we see

many preparations of which the chief virtue is supposed to be that they contain *all* the digestive principles. These can be active only so far as they contain pepsin, and have no advantage over the simple drug.

It has also been shown that certain substances combined with pepsin in solution, render it inert. Alcohol is one, and even in moderation diminishes its action, while, in any quantity, the activity of pepsin is totally prevented. This is a point often lost sight of, and serves as a hint concerning the use of liquors at meals, by dyspeptics.

Pepsin and bismuth are frequently combined when treating dyspepsia, and should always be administered in pill form, owing to the difficulty of keeping both agents together in a permanent solution, one requiring a somewhat acid menstruum, the other a neutral or an alkaline one. Nothing is more common than to see elixirs of pepsin, bismuth and strychnia, which darken, harden, and shrink the albumen placed in them. Liquid preparations are theoretically, if not practically, inconsistent, and will generally be found to be unsatisfactory.

In treating that form of dyspepsia met with in malarious districts and in persons who have passed the autumn months in the country, much good can be obtained from quinine, or a combination of quinine, iron and arsenious acid, given after meals and for a length of time. When using quinine the pill form is the best that can be resorted to, the soluble-coated pill possessing many advantages over the solutions, capsules or wafers. In an article upon quinine, published about four years ago, I called attention to the ready solubility of the bi-sulphate and urged its use, being the most soluble of the quinine salts used in medicine. On this account it is more active and better calculated for administration in pill form than the sulphate; but it should be borne in mind that as the bi-sulphate of quinine contains a smaller proportion of the pure alkaloid, the amount being only about 60 per cent., the dose should be one-fourth greater than that of the sulphate, in order to represent the same amount of alkaloid.

Iron is a most valuable remedy in the treatment of dyspepsia, but furnishes best results when given toward the termination of a course of treatment.

Active business men, brain-workers, and those who are subjected to much mental anxiety or overwork, frequently suffer from what is termed "nervous indigestion." To meet this condition we possess a valuable remedy in phosphorus, which should be given in small doses, immediately after meals.

The best form of administering phosphorus is that afforded by the manufactured pill, which possesses many advantages over those made to order in the prescription room. A pill of this kind is exceedingly difficult to make, requiring especial care and skill. The phosphorus should be incorporated with the various ingredients, while in solution, so as to effect a thorough and uniform diffusion; they should also always be coated, in order to prevent oxidation. I have made some interesting experiments with phosphorus pills manufactured by Schieffelin, of New York, proving that their coating entirely protected the enclosed mass. A pill that had been manufactured a year ago was cut open, and the mass found to be as soft as though made but a few days. Another pill, of the same manufacturer, made eight years ago, was found to be but little harder. Upon placing two of the latter pills in a small quantity of water, the coating was quickly dissolved, the mass broken up, and when placed in in a dark room the vial was plainly perceived, owing to the unaltered luminous property of the phosphorus. This simple experiment goes to show that if properly made and coated, a manufactured pill does not become affected by age, nor do the various ingredients become so altered that they lose their medicinal properties. Experience has shown that such pills may be kept for years, even in a very warm climate, and still produce prompt and active effects when administered.

In treating the secondary forms of syphilis, the plan recommended by Dr. Keys, "of administering mercurials in granules," possesses many advantages over the older method of prescribing the same substance in solution. Intestinal irritation seems to be later and less painful in its manifestations, it is an easier matter to regulate the quantity given when pursuing the "tonic treatment," and the granular form is the most convenient and portable for the patient. Certain cases will be encountered where the symptoms are so pressing that there is not time to get the patient quietly under the influence of the drug, when administered in granules, but fortunately such are not frequent, and can be met by resorting to the older methods until the urgent symptoms abate. The obstinate lesions occurring in the mouth are most successfully treated with granules, the patient being told to allow the little pill to slowly dissolve upon the tongue, thus obtaining the effect of a solution of corrosive sublimate upon the patches, while at the same time the general treatment is pursued.

In a case where the mucous patches in the mouth

were very numerous and troublesome, no impression could be made upon them until the plan mentioned was tried, when they disappeared in a short time.

While pursuing the hyoscyamine treatment upon a patient afflicted with mental disease, the manufactured pills were of great advantage, as there was no doubt as to accuracy of dose, and they were easy to administer.

In a recent conversation with one of the leading alienists of this city, I was informed that he was using pills of this form upon several cases, considering them preferable to the hypodermic method.

When prescribing a medicine so powerful in its influence that doses of from $\frac{1}{200}$ to $\frac{1}{5}$ of a grain are desired, it is almost impossible to obtain the exact amount in each pill, unless a large number are prepared at one time and great care exercised in the manipulation of the mass. With drugs like arsenious acid, aconitia, aloin, atropia, codeia, digitalin, hyoscyamine, morphia, phosphorus, strychnia, and the more powerful mercurials, accuracy of dose and the decreased possibility of a careless mistake, are points in favor of the manufactured pill; while with such remedies as asafoetida, quinia, and others possessing a very unpleasant taste, the coating removes the objection to their use, which patients so frequently make.

Little children who struggled and had to be forced to take quinine when prescribed in solution, powders or uncoated pills, will take the drug without objecting, when given in a coated pill.

In this article it has been my intention to point out a few of the advantages possessed by manufactured pills, over those prepared in the old and ordinary manner, and to speak of a few cases in my own practice, where the results from their use have been satisfactory. During the past seven years, the soluble-coated pills made by Schieffelin & Co., of New York, have been the ones prescribed, and I do not hesitate to recommend them to the profession.

The "coating" of pills is a subject of much importance and of especial interest to physicians.

In a future article I shall bring to their notice some facts, to add to those published a number of years ago.

1423 Walnut Street.

—M. Renzi has contributed a paper on pulmonary syphilis to the *France Médicale*, in which stress is laid on the absence of bacilli in the sputa of such cases.

A FURTHER NOTE ON THE SPECIFIC TREATMENT OF ENTERIC FEVER.

BY JAMES C. WILSON, M. D.,

Physician to the Jefferson Medical College Hospital, and to the Philadelphia Hospital.

Read before the College of Physicians, of Philadelphia.

A year ago I read before the College a brief paper "On the Management of Enteric Fever according to a Plan Based upon the So-called Specific Treatment." That communication, which will be found in the sixth volume of the third series of the *Transactions*, beginning on page 221, was the outcome of the clinical study of a very limited series of cases in which the plan referred to had been fully carried out. The object of the present communication is to lay before you the results of the plan as employed during another year in the management of a second series of cases.

Before presenting to your attention the facts relating to this second series of cases, permit me to state that the plan of treatment consists in a close adherence to the so-called rational or expectant method of treatment in all its details, plus the systematic use of purgative doses of calomel in the early days of the attack, and of iodine and carboic acid throughout its whole course. These drugs are administered chiefly with the intention of realizing their effects in diminishing the activity of the supposed specific cause of the disease and the treatment is therefore properly designated a specific treatment, in contradistinction to the rational or expectant treatment on the one hand and to all forms of symptomatic treatment on the other.

The first series of cases numbered sixteen, of which all recovered.

The second series, treated during the year 1883, by a curious coincidence, also numbered sixteen, of which two died.

Of these, seven were severe, the temperature reaching or exceeding 104° F. (40° C.)

Of these seven severe cases, the two which terminated fatally were colored men, admitted to the wards of the Philadelphia Hospital late in the attack and in a state of profound stupor. One, aged twenty-seven years, died on the seventh day after admission; the other, aged forty-seven years, on the twenty-first day. The latter passed albuminous urine, and presented after death the lesions of interstitial nephritis in addition to those of enteric fever.

Two non-fatal cases were attended by profuse and repeated intestinal hemorrhage in the third week. One of these, a man aged twenty, had,

during convalescence, necrosis of the mastoid process of the right temporal bone. One case of great severity occurred in a man aged sixty-two years, whose convalescence was, however, rapid and without sequels.

No instance of relapse was observed.

The characteristic eruption was present in all the severe cases. It was not discovered in four of the mild cases.

The average duration of the five severe cases in which recovery took place was about thirty-two days; that of the nine mild or medium cases was about twenty-four days.

Of the whole number, six were treated in hospital and ten in private practice.

It is worthy of note that the convalescence in these cases was rapid, as a rule, without complication, and that no instance of relapse occurred. An analysis of the combined series shows as a result of this treatment in my hands thirty-two cases, sixteen treated in hospital, sixteen in private practice, with two deaths (cases admitted to hospital in profound stupor). The death-rate is, therefore 6.25 per cent. I refrain from citing, for comparison, the familiar statistics of the death-rate of enteric fever. We have come to regard it as ranging from 15 to 20 per cent., with a more favorable showing in private than in hospital practice. But Welch, from the statistics of the medical service of the British army, has recently shown it to exceed 33.3 per cent., and Dr. Francis Delafield, in an important statistical paper on this fever as it occurs in New York (see *Medical News*, November 24, 1883), has shown that the death-rate in hospital cases, though varying in different years, ranges between 20 per cent. as the lowest, and 30 per cent. as the highest limit.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED IN THE HOTEL DIEU, PARIS, FRANCE.

BY DR. F. RAYMOND,

Fellow of the Society of Medicine, Physician to the Hôpital des Incurables.*

1. Acute Meningitis in the Course of Typhoid Fever. 2. Tubercular Meningitis in an Adult.

GENTLEMEN: The last few days we have observed together two patients who have succumbed to meningeal affections. One of them has had acute meningitis with rapid march in the course of typhoid fever. The other has died in consequence of tuberculous meningitis; this patient was a woman, aged 45, and the diagnosis of her

* Translated for the REPORTER by E. P. Hurd, M. D.

affection presented many difficulties, as you well remember. It has occurred to me that it would be interesting to review in detail these two cases.

1. The 16th of August, there entered our hospital, Ward St. Christopher, No. 6, a man 26 years old, painter by occupation. At the morning visit August 17th, the patient appeared prostrated, depressed, and in a partial stupor. The pale complexion, the flushed cheeks, the injected conjunctivæ, the burning hot skin, indicated at once that he was suffering from an intense fever, and in fact the thermometer gave an axillary temperature of 103° F. The pulse was weak and rapid (120 a minute), and manifestly dicrotous. When questioned, the patient responded willingly and with precision. He complained particularly of a violent headache, seated principally in the frontal region, and of tinnitus aurium. He also complained of pain in the back of his neck, in the region of the nucha; this pain was dull, continuous, and was increased by sitting up, which also caused vertigo and marked pallor of the countenance. The appetite was gone, there was intense thirst; the tongue, covered with a thick white coat, was dry at the tip and borders, which were of a lively red color, and appeared devoid of epithelium. The patient was much constipated, the bowels did not move without purgatives or injections.

The abdomen, somewhat tympanitic, was painful to pressure over the right iliac fossa. Pressure elicited no gurgling sounds. There were several lenticular rose-spots on the belly and back.

Percussion showed the spleen to be much augmented in volume. The nasal fossæ were dry, the voice was slightly hoarse; there was, however, no catarrhal angina.

Percussion of the thorax revealed nothing in particular; there were here and there a few snoring and sibilant rales, especially at the bases. Heart beats weak and precipitate. Urine, high-colored, acid, and albuminous. There seemed to be no marked predominance of morbid manifestations on the part of any of the viscera or the nervous system.

On interrogating the patient, we learned that previously to this sickness he had enjoyed good health. He came to Paris two years ago, pursuing his occupation till within about ten days, when, without any appreciable cause, he felt his strength leave him. He could not walk without vertigo; there was ringing in the ears; he slept poorly during the night; had startings in his sleep and frightful nightmares. At length he lost his appetite, and not being able longer to sit up, he decided to enter the hospital. Never had nose bleed; bowels always constipated. The diagnosis in this case was easy from the very first. The disease dated back in fact eight or ten days. We could therefore at once exclude all the eruptive fevers, which, as you know, during their prodromic period often manifest a clinical tableau which resembles the initial period of typhoid fever. Besides, on taking into consideration the cephalalgia, the lenticular spots, the meteorism, the augmentation of the volume of the spleen, the stupor, the insomnia, the state of general prostration, the march of the disease, there seemed to be warrant, notwithstanding the absence of diarrhoea and constipation (you have often seen in my service patients affected with typhoid fever, and who

were constipated—this has been the case in several epidemics), there seemed, I say, to be warrant for the diagnosis which we made, of typhoid fever; all the symptoms of the fever were in fact perfectly regular, if I may thus express myself. There was no predominance of symptoms on the part of the lungs, nervous system, or other organs, suggesting broncho-pneumonia, meningitis, etc. The prognosis, with such reserves as belong to every case of typhoid fever which has reached its eighth or ninth day, was quite favorable.

The 16th of August, the day of his entrance into the hospital, I put him on the following treatment: wine and water for drink; meat broth for nourishment; 30 grains of salicylate of magnesia every two hours, till a drachm and a half was taken; this to be the daily allowance of the medicine. You know, gentlemen, that the parasitic theory of infectious diseases is making a great many converts every day, and by reason of the new inclusion of typhoid fever in the category of germ diseases, there is a great therapeutic movement in favor of the antiseptic medication. You know the results furnished by the carbolic treatment and the treatment by salicylate of soda. One of the objections, and one well founded in my estimation, against these various medicinal agents—given with antiseptic intent—is the impossibility of making them reach the last portions of the intestines, where are habitually seated the lesions of typhoid fever.

Professor Vulpian has asked if it might not be possible to have recourse to other medicaments equally antiseptic, and capable, not being immediately absorbed, of having a local effect on the lower portions of the alimentary canal. It is in accordance with this view that I employ salicylate of magnesia, and I have already tried it, as you remember, on other typhoid patients. I begin by giving 30 grains a day, then a drachm, then a drachm and a half; I hope thus to obtain a purgative action, as well as a lowering of the temperature.

In the case of our patient, I have been disappointed in my expectations. The 17th of August we gave 90 grains. The temperature, which in the morning was $102\frac{1}{2}^{\circ}$ F., rose to 104° in the evening. There was no movement of the bowels following the large doses of the salicylate.

August 18th, the general condition was the same, that is to say, generally assuring. I increased the salicylate of magnesia to 2 drachms a day, in four doses of one-half drachm each. The temperature in the morning was 103° , in the evening 104° ; the patient remained constipated.

August 18th, a little more stupor. Tongue dry and black. Salicylate of magnesia increased to $2\frac{1}{2}$ drachms. Morning temperature $102\frac{1}{2}^{\circ}$, evening temperature 102° , a decline of one-half degree. Pulse small, rapid, and irregular.

August 20th, general condition is the same. Salicylate increased to $3\frac{1}{2}$ drachms. Notwithstanding these large doses, constipation persists. An enema was given in the evening, which resulted in five diarrhetic stools. Morning temperature 102° F., evening temperature $101\frac{1}{2}^{\circ}$; a fall of one-half degree.

August 21st, great increase of prostration; patient can hardly answer questions, his responses are vague and uncertain. There is some restlessness and agitation. The tongue is dry, the gums

fuliginous; meteorism much more pronounced; pulse very irregular. Discontinued the salicylate; N. B., to give wine, broth, quinine, and employ cold sponging. Morning temperature 102°, evening temperature 101.5°. About 4 p. m. the patient was suddenly taken with a violent delirium (delirium of action and of speech). It was necessary to put on a strait-jacket, and the entire night of the 21st, and the next day, he was in a state of extreme agitation.

The morning of the 22d, his condition was as follows: He lay on his left side, his head somewhat thrown backwards; the muscles of the neck slightly contracted, the eyes protruded and convulsed, turning upwards and to the right, the pupils contracted. The patient kept uttering plaintive cries. The mouth, wide open, gave issue to a frothy, sanguinolent mucus; the muscles of the face were the seat of fibrillary twitchings; the arms and the legs were stiff, and agitated by short, rapid spasms, ceasing for a few moments, and returning more violently than ever. The temperature had again risen to 104° F.: pulse still irregular.

In the presence of these complications, so marked in their expression, divers hypotheses suggested themselves. In order intelligently to appreciate these phenomena, their diagnostic and prognostic signification, I made successively the following suppositions: (1) Is it possible that our patient, whose occupation has been that of a painter, is now suffering from saturnine encephalopathy in the course of his typhoid fever? There was nothing to authorize this view of the case; there was no red line along the gums, he had never had any paralysis of the extensors or other manifestation of lead poisoning. (2) Have we here a case of uræmic eclampsia, supervening in the course of nephritis, a frequent complication of typhoid fever? There was no increase in the urine of albumen, which was even less in quantity than at the commencement of the fever. The temperature, far from falling, was higher; there was, moreover, stiffness of the neck, contracture of the ocular muscles, the delirium was very intense, and the patient was only at the tenth or twelfth day of the fever. For all these reasons, I decided that uræmia was not the cause. (3) Have we to do with simple nervous phenomena, a consequence of the aggravation of the fever? One certainly often sees, in the course of typhoid fever, which has been very regular during the past few days, a violent delirium set in with carphologia, general muscular tremblings, etc.; and at the autopsy, if the patient dies, which is not always the case, nothing is noted on the part of the brain but a well-pronounced hyperæmia of the meninges and gray substance. In our patient all the symptoms were too well marked not to indicate clearly, especially if due regard were paid to the contractures, the convulsive shocks, etc., a material lesion of the nervous centres, an inflammatory lesion developed in the course of typhoid fever; and on taking into consideration the symptomatic aggregate, in particular the contractures, the irregularity of the pulse, it seemed almost certain that the trouble was localized in the meninges. There was warrant for going even farther, and for positively affirming that the meningitis was seated at the base of the brain. This

was my conclusion, and the autopsy proved it to be correct.

You should remember that such cases, relatively speaking, are very rare. As I told you, the first nervous disorders of dothineritis have sometimes a great resemblance to those of meningitis, to wit, the headache, delirium, ocular troubles, the vomiting, the hyperæsthesia, etc. Hugues, who has carefully studied these facts, thinks that generally, we should exclude the hypothesis of meningitis or meningo-encephalitis as complications of typhoid fever. Nevertheless, Lèrèboullet, in a very able monograph, has shown that these meningeal accidents may be present in the stationary period (*period d'état*), or even from the very commencement of the fever.

"In the first class of cases," he says, "the stupor becomes extreme on the eighth or tenth day; the nocturnal delirium intense. At the same time vomiting sets in, there are oculo-pupillary troubles, convulsive movements, contractures, with fixation of the head backwards. Nevertheless, these symptoms, even when they all occur together, do not make the diagnosis sure. The temperature in general undergoes a relative depression, and presents oscillations of great irregularity; the pulse becomes, and remains during several days, irregular, slow, wavy; the respiration is also irregular and sighing. If in these conditions the delirium is intense, the cephalalgia violent, the face spasmodically distorted; if the eyes squint, meningo-encephalitis is almost certain."

You observe, gentlemen, how closely this description resembles the clinical tableau presented by our patient; and in this connection I must refer you to the classical treatise of Murchison. You will there see how difficult is the diagnosis in the presence of such symptoms. Having settled the diagnosis of meningeal complications, it was easy to foresee the fatal result which occurred in the course of a couple of hours.

The autopsy was made the 23d of August. These, in brief, are the results:

Abdominal Cavity.—The intestines were distended with gas (meteorism); their external surface (principally in the last portion of the ilium) injected and aborescent in spots. The small intestines were washed and incised along their convex border; a few feet above the cæcum a number of Peyer's patches were found in various stages of inflammation. Some of them, but little prominent, were softened; others were tumefied and firmer than the preceding; there were still others, very near the cæcum, which were ulcerated, the ulcerations having the form and size of Peyer's patches.

The mesenteric glands, notably enlarged, were soft and of a livid red color on section. The spleen very much hypertrophied (it was three times the ordinary size), was softened, so as to be diffuent, the parenchyma was of a reddish-dark color. The liver, a little congested, presented nothing worthy of note. The kidneys were large and congested; their capsules were removed with difficulty. Section of these organs showed only congestion.

Thorax.—The mucous membrane of the bronchi presented a deep red injection; it was lined by a viscid mucus; the lower lobe of the left lung

was congested and œdematous. There was the same condition in the right lung, but less marked. The tissue of the heart, a little discolored, offered nothing particularly worthy of note.

Cranial Cavity.—On removing the calvarium, the membranes of the brain were found congested; the superficial veins were very much engorged. The membranes over the convex surface were incised, and reflected back; the same state of hyperæmia was noted in the convolutions. At the base of the brain a purulent exudation was found over the optic commissure, and within the hexagon of Willis. This exudation was greenish-yellow, and adherent. It covered all the blood vessels and all the nerves of the region. On each side, in the substance of the pia mater, it extended along the sylvian arteries to the surface of the island of Reil. Over the tubercular quadrigemina, along the fissure which separates the cerebellum from the posterior lobes of the cerebrum, and between the crura cerebri, appeared the same exudation, and in large amount. Nowhere was there any trace of tubercle granulations. There was no œdema of the cerebrum. The spinal cord presented nothing worthy of note.

(To be Continued.)

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

The Bacillus Tuberculosis and the Etiology of Tuberculosis. Is Consumption Contagious?

BY H. F. FORMAD, B. M., M. D.

(Continued from page 368.)

From the examination of tubercular tissue from various sources, I may say that I have seldom succeeded in finding tubercle bacilli in newly-formed tubercular tissue made up of small lymphoid cells. In older tubercular tissue, made up of opaque epithelioid cells and giant cells with a nodular arrangement, particularly when this tissue is undergoing necrotic change, bacilli are quite common, except in some forms of tubercles of serous membranes, to be referred to later. Tubercle tissue that has undergone a complete cheesy change, contains the greatest number of bacilli. Cheesy matter of any source is a dead substance, and it is usually inhabited by bacilli, if these get access to it; while other bacteria are scarce on this nidus.

Examination of materials from the autopsy table shows that tubercle expresses itself in various manners. Primarily, tubercle occurs as a mere infiltration of lymphoid cells in the adventitia of blood-vessels, or as small nodular masses of lymphoid infiltration around blood-vessels or ducts of any kind; or tubercle tissue may organize within blood-vessels and various ducts. Sometimes tubercle appears as a diffuse lymphoid infiltration, extending over a larger area, showing a greater or less tendency towards the formation of nodes and cheesy or fibroid change, as in the lungs. Tubercle tissue may form masses of the size of a hen's egg, particularly in the brain and serous membranes. In the lungs, in racemose glands, and in mucous membranes, catarrhal

changes always follow the tubercle infiltration. On serous surfaces primary tubercles appear often as flat or nodulated patches of various sizes (in peritoneum), or as fungoid vegetations (in synovial cavities), or even as large plastic masses (in omentum). In the skin and mucous membranes, tubercles produce eruptions, ulcers or nodular indurations; in bones—caries, with abscess formation in surrounding parts (cold abscesses). Fibroid capsules, made up of connective tissue, due to reactive inflammation, enclose often smaller or larger tubercular masses, especially if these have undergone cheesy change.

Primary tubercle manifests itself quite variously in different animals. In Guinea-pigs and rabbits, it appears mainly as small cellular infiltrates; in dogs, it often undergoes a fibroid change; in goats, and especially in cattle, tubercle often forms large nodular, sometimes pedunculated masses, which often calcify;* in birds, it forms, preferably in the liver, large round mulberry masses, which, on section, appear sometimes as horny radiating structures.

Secondary tubercle presents an aspect entirely different from primary tubercle, and it manifests itself in nearly all instances in but one form, namely, as a fine milinary eruption representing those well-known gray semi-transparent nodules of the size of a millet-seed, called milinary tubercles. These seem to lie in the perivascular lymph-spaces, and are probably distributed throughout the body mainly by means of these lymph-channels of the blood-vessel walls. Tubercles do not occur in avascular tissues. There is, however, a second form of embolic or metastatic tuberculosis, which evidently distributes itself by the blood-current proper, and it appears in the form of conical masses or round nodes, which may reach the size of a walnut, and are located usually at the bifurcation of arteries. No mention of this form of tubercle is made in textbooks, although upon the post-mortem table this variety of tubercle is a very common occurrence; Especially is it seen in the lung and, more rarely, in the spleen and liver.

Taking into consideration the enormous frequency of local tubercular lesions (counting pulmonary phthisis into this category), the occurrence of secondary or true milinary tuberculosis must be considered as a rare affection. A tuberculosis affecting the lining of even the whole peritoneal cavity, including its lymphatic glands, or that of the pleural sacs, or that involving one or both lungs, must, when occurring thus in but one locality, be considered a local tuberculosis. In such instances, the tubercle spreads by continuity of structure.

It is a fact, established by Virchow, that tuberculosis is at first a local disease, and only becomes generalized secondarily. This generalization does not affect the blood like in infectious diseases, but it takes place simply as an embolic process like in some tumors. Local tuberculosis in external organs and accessible lymph-glands is

*I have met with, on the autopsy table of the Philadelphia Hospital, two cases of tuberculosis in man that were identical in every respect to bovine tuberculosis. Dr. Creighton, of Cambridge, England, describes a number of cases from his own observation, and collected from literature. Bovine Tuberculosis, London, 1881.

often a harmless affection. It is strongly related to primary tumors. Complete early removal of local tubercular lesions is practiced successfully in Europe. Volkmann and others have removed, for instance, lymphatic glands, testes, and joints affected with fungoid synovitis, with the object of preventing secondary tuberculosis, and have thus prevented a general miliary tuberculosis.

Nor should a gloomy prognosis be given in early phthisis. It is astonishing what a large number of healed cavities and cicatrices in the apices of lungs are found on the post-mortem table, indicating the healing of phthisis in persons who long subsequently died from some other causes in later life.

We have seen that tuberculosis manifests itself quite differently as to structure, appearance, distribution, and termination, in the various animals, and even differently in the various organs of one individual. Our studies have shown that these variations in the expression of tuberculosis depend upon the structural peculiarities of the various kinds of animals, and sometimes even upon the difference of the structure in animals of the same species. We have also seen that even in human beings tubercle tissue may manifest itself in various forms. In some individuals it develops rapidly, and spreads over large areas, becoming generalized and undergoing speedy cheesy change; in other individuals it develops slowly, fibroid change predominating; and in others the tuberculous product may calcify. In most individuals tubercular lesions may remain entirely local.

It is well known from clinical experience that the general condition of the organism has very much to do with the healing of a local tuberculosis. A local tuberculous inflammation may heal or become arrested in its progress, if the patient "gets strong," or it becomes more developed and aggravated if his general health "runs down." Observation has further shown that any simple non-specific wound in a weak, ill-nourished individual, may fail to heal, becoming unamenable to treatment, and probably assuming a tubercular character.

In some animals spontaneous tuberculosis is unknown, and while some animals are easily tuberculizable experimentally, in others tuberculosis cannot be produced.

It is in accordance with experience that in a large number of families the predisposition to tuberculosis is hereditary, and that their members die promptly of phthisis at a certain age from the effects of a simple "cold," while in the history of other families this affection is unknown. Every individual is liable to acquire syphilis, smallpox, and other contagious diseases, but it is proven that not every one can have tuberculosis. A special predisposition and a special individual are required. In such an individual, a simple inflammation resulting from any cause whatever, can produce tuberculosis.

Therefore, for the development of tuberculosis, two conditions are necessary:

1. A *definite* soil.
2. An *indefinite* irritant.

The reaction of the soil is always the same under the influence of any irritant, whether that irritant be a bacillus or not; since the result (tu-

berculosis) following a lesion in such a soil depends upon the character of the soil and not upon the character of the irritant, even though one irritant, say bacilli, may act more readily than other irritants.

In view of the demonstrated fact that simple injuries of any kind can excite a tuberculosis, but only in certain individuals and tissues, it is evident that tubercularization is determined by the kind of soil and not by a specific irritant. *Tubercle should, therefore, be defined as being an inflammatory new formation in a specific individual or tissue.*

What is the place for tubercle in pathology? The anatomical criterion for tubercle is a granulation tissue made up of lymphoid or epithelioid cells, which, on account of deficiencies in the soil, does not undergo any higher organization, nor tend to heal; but tends to form nodes and undergo cheesy change. Under favorable circumstances it may heal through fibroid change. The elements of tubercle tissue may spread by continuity of structure to surrounding parts, and occasionally tend to the production of metastasis, distributing themselves by means of the lymphatic system principally, and rarely by blood-vessels; and may generalize themselves through the whole body, forming miliary nodes or tubercles.

This miliary eruption of tubercle appears to have the same relation to the primary tubercular growth as the secondary metastatic cancer eruption has to the primary cancerous growth. Like in cancer, the elements of tuberculosis may be arrested temporarily by the lymphatic glands governing the affected region.

In tuberculosis, lymphoid cells form the nodes; in cancer, epithelial cells. While secondary cancer nodes are, as a rule, much larger than tubercle nodules on account of the well-known great proliferating power of epithelium, it is also a fact that cancer may appear as a miliary carcinosis, expressed by minute nodules not distinguishable macroscopically from miliary tuberculosis. Cancer is proven to be a local disease. It is not contagious. It is infectious only to the individual who is affected by it; i. e., it is self-infectious. And so is tubercle, in every respect, a local, self-infectious disease.*

That local manifestation of tuberculosis in the lung, which is designated by the traditional name of pulmonary phthisis, forms perhaps nine-tenths of all tubercular lesions, and hence deserves some special consideration.

I arrange myself with those who regard all forms of pulmonary phthisis as tubercular. There are only three or four lesion of chronic wasting disease of the lung which may be excluded from phthisis. These are atelectasis, or collapse from

*Cancer and tubercle are considered analogous lesions, and classed with tumors, by a number of pathologists. This fact would not make it inconsistent to call tubercle an inflammatory product, as the distinction between inflammatory processes and tumor formation is a purely arbitrary one. Virchow pointed out that the majority of tumors are purely inflammatory products (a statement antedated twenty years by Prof. S. D. Gross). A few years ago I made the question of the etiology of tumors a subject of careful personal study, which I yet continue, and I am forced to the conclusion that *all* true tumors are inflammatory products, and that no line of distinction can be drawn where the process which we call inflammation ends and where tumor formation begins.

pressure of effusions; bronchiectasis, in which the enormous dilatation of the bronchi may lead to large cavities and atrophy of lung structure; primary fibroid changes; and abscess of lung. Yet all these lesions may become tuberculous from secondary inflammatory changes which usually follow.

The lesions that are known as catarrhal pneumonia, broncho-pneumonia, pneumonic phthisis, cheesy pneumonia, tubercular phthisis, and fibroid phthisis, are all manifestations of the one disease. Such a classification may be, however, entirely justifiable and useful for practical, clinical and therapeutic purposes. Pathologically considered, phthisis is a local tuberculous inflammation of the lung which may manifest itself in various ways, the appearances depending upon the duration of the disease, the mode of onset, and the constitution and condition of the patient. Lesions representing the different forms of phthisis, and their transition from one form to the other are often seen in the same lung.

Virchow insists that nothing should be considered tubercular unless it shows true tubercle nodules, and hence he does not recognize cheesy pneumonia—or cheesy hepatization, as he calls it—as tubercular, although he does not object to the term phthisis for this lesion.

I was fortunate enough to attend several times the classical demonstrations on this point of Virchow, the father of the view of the dual origin of cheesy matter and phthisis; yet, from our present knowledge of what constitutes tubercle, I cannot help interpreting all the forms of phthisis as of a unitarian origin. It is, after all, as Virchow himself says, only a matter of nomenclature. If we consider the presence of bacilli of Koch as the differentiating point between what is tubercular and what is not, we find that catarrhal and cheesy pneumonias are the most tubercular of all, because they contain, as a rule, more bacilli than any other forms of phthisis.

Although cheesy pneumonia, like all forms of phthisis, remains commonly a local affection, it is seen on the autopsy table to give rise to miliary tuberculosis at least as often as any of the other forms of local tuberculosis.

We are then at present at the same standpoint in regard to the character of tubercle and cheesy matter as Lænnec (1819); and it is indeed perfectly reasonable to suppose that any cheesy matter found in a scrofulous person or animal is tubercular. Of course it is evident that tuberculosis of the lung is usually accompanied by simple inflammatory products, such as organized connective tissue (chronic phthisis), or unorganized croupous and catarrhal exudates (predominating in acute phthisis), which may undergo rapid necrotic and purulent changes, resembling cheesy material. For the latter products the name "coagulation necrosis," as applied by the Heidelberg and Leipsic people, may be employed. Tubercle bacilli are commonly found in this coagulation necrosis. True tubercular cheesy matter should, I think, be considered only that product which is derived from the breaking-down of previously well-organized tubercle tissue.

I need not refer to the details of the manifestation of tubercle in the lung, as these are too well known. But I would like to remark here that

those small whitish or gray nodules, usually of somewhat irregular shape, which are seen more or less densely scattered throughout the parenchyma of lungs affected by phthisis, are not miliary tubercles, but minute foci of broncho-pneumonia.*

These minute broncho-pneumonic foci take their origin from tuberculous matter disseminated by means of air-passages, as explained before. *Miliary* tuberculosis of the lung distributes itself by means of the perivascular lymphatics, is very rarely accompanied by catarrhal changes or hepatization, and rarely arises from a primary tuberculous focus of the lung itself; it is, as a rule, a part of general tubercular disease.

2. The Predisposition.

Having shown that for the production of tuberculosis we need a special soil, and that the irritant is only of secondary significance, some inquiry into the nature of this soil is necessary.

The question of the predisposition to tuberculosis, as it stands at present, must be considered from three aspects:

1. The clinical aspect.
2. The anatomical aspect.
3. The bacteridian or parasitic aspect.

The consideration of the clinical aspect of the predisposition to tuberculosis is invaluable, as it rests mainly on actual observation, on demonstrated clinical facts, and on conclusions drawn from statistics.

From time immemorial, a clinically well-defined condition of the system, known as the strumous diathesis in its various forms, has been recognized. This condition will be considered later on.

There are a number of ailments which, from the experience of clinicians, are known to have a great, direct or indirect, influence in the development of general tuberculosis and pulmonary phthisis; or are known to create conditions of the system that predispose it to this malady. Such are syphilis, inflammation of serous membranes, bronchitis, croupous pneumonia, diabetes, the exanthemata, especially measles and typhoid fever, deformities of the skeleton, rickets, cerebral and spinal diseases of various kinds, dyspepsia, the puerperal state, uterine diseases, prolonged nursing of children, onanism, change of climate, continuous loss of sleep, distress, etc.

That exhaustion, exposure, the deprivation of food, and other hardships of campaign life, etc., are prominent etiological factors in the production of pulmonary consumption, is learned from the accounts of military surgeons, who observed among young, robust soldiers a remarkable increase in the morbidity and the mortality of phthisis, during and immediately after the close of a war. Such observations have been made in the Franco-Prussian and Turko-Russian campaigns. The fact that consumptive soldiers are not allowed to enter upon a campaign (certainly not in Germany and Russia) excludes here the probability of contagion.

Statistics also show the remarkable prevalence of phthisis in persons of certain occupations, such as stone-cutters, miners, cigar-makers, weavers,

*See, in connection with this, the excellent studies of Wm. H. Mercur, from the pathological laboratory of the University of Pennsylvania, published only in abstract form in the *Philadelphia Medical Times*, July, 1883.

telegraph operators, book-keepers, and persons engaged in certain other occupations of a more or less sedentary nature. It is more natural to suppose that the disease or the predisposition to it is created by the character and the conditions of the occupation, than that a contagion should affect preferably shoemakers, miners, or soldiers in the battle-field. Again, in most phthisical patients the beginning of the disease can be plainly attributed to an exposure, to a "cold."

On the other hand, there are pathological conditions or diseases which appear to prevent the development of phthisis and tuberculosis in general. It is an established clinical fact that phthisis is extremely rarely, if ever, associated with mitral heart-disease; and, from my own observations, I believe that phthisis is rarely coincident with tumors. For the latter circumstance, I can offer no explanation; nor is there any statement to this effect in literature. Rindfleisch has suggested that heart disease prevents the development of phthisis by inducing repeated slow congestions of the lungs, these congestions producing an overgrowth of the muscular tissue of the bronchioles and air-vesicles, which thus gains strength for repelling the exudates following inflammation.

If tuberculosis were depending upon a contagium for its development, neither heart nor tumor disease, nor any condition of the organism, could ever prevent its occurrence.

All the clinical facts above referred to prove definitely the necessity for a predisposition for the development of tubercular disease, and militate against the necessity of a contagium.

The anatomical aspect of the question—the morphology of the soil in which tubercle develops—is the most important aspect.

Beneke* tries to explain the disposition to tuberculosis by a disproportion between the size of the heart and blood-vessels and other organs to the bulk of the body.

Schottelius† made recently some interesting observations concerning the mode of termination of the smallest bronchioles, and their relation to the lung acini in different animals. He found that in the carnivora the entrance of the bronchioles into the acini presented very small apertures, so that the air-vesicles were not easily accessible to irritants; while in the herbivora the terminal bronchial terminations were quite wide, thus permitting the free entrance of irritants. He states that in man the bronchial terminations congenitally approach sometimes those of the carnivora, and sometimes those of the herbivora. In the latter type, he believes he has found anatomical explanation for the predisposition in some in some individuals to pulmonary tuberculosis.‡ Weigert, of Leipzig (one of the most enthusiastic germ-theorists), properly remarks upon the observation of Schottelius, that it does not explain the predisposition, as the same animals will react, upon the introduction of the "poison of tuberculosis," into any other part of the body, where the bronchioles do not come into play.

My own studies upon the minute anatomy of the tissues of man and of animals predisposed to tuberculosis, extended over a large amount of material, and gave results which, to my mind, satisfactorily explained this condition. These results I announced at a meeting of the Society in October, 1882.

The anatomical peculiarity observed in either man or animals, be it inherited or acquired, I first showed to be, briefly stated, as follows; all the tissues of the body approach somewhat an embryonal type—they are peculiarly rich in nuclei and young cells, and the lymph-spaces of the connective tissues are narrower, fewer in number, and show a great many more cellular elements in the serofulous than in the non-serofulous. So far, subsequent observations of others agree with mine. Objections are raised only as to the direct relation between these structural peculiarities and tuberculosis. Here I must state that I only suggested, and never asserted, the necessity of such a relation. It is quite possible that there are some other and more striking peculiarities in the morphology of serofulous animals yet undiscovered. This much I can, however, reassert to-day: that tuberculosis usually ensues when a simple inflammation is set up by any kind of injury, in animals with the structural peculiarity which I have described; but tuberculosis cannot be produced in animals that do not have this structural peculiarity, so far as my experiments show, unless the injury is inflicted upon serous membranes.

For the details of my researches in this direction, I must refer to my first paper upon this subject.*

(To be continued.)

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Discussion on the Specific Treatment of Typhoid Fever.

(See page 391.)

Dr. Arthur V. Meigs said: This so-called "Specific Treatment of Typhoid Fever" appears to me a mistaken plan founded upon an untenable theory. We are asked in the first place to assume that typhoid fever has for its cause a germ whose very existence is not known, and second that calomel, iodine, and carbolic acid, given by the mouth, will meet with and destroy this imaginary germ. Neither of these assumptions can be considered proved. Why do we not give the same drugs in cases of scarlet fever, measles, or smallpox?—for there is as good reason to believe them to originate from germs, and that the same germicides would be effective for their destruction. I should not be so outspoken in my denunciation of this method of treatment if it could be looked upon as harmless; but it seems capable, on the contrary, of much mischief. Whatever may be the effect of such large doses of iodine and carbolic acid, we were almost all taught and have up to this time believed the effect of purges given in the earlier stages of typhoid fever to be most disastrous. Dr. Wilson himself, I doubt not, was taught, as I was, when a resident physician in the Pennsylvania Hospital, that even a teaspoonful of castor oil given to a

* Die erste Ueberwinterung in Norderney, Norden, 1882.

† Virchow's Archive, vol. xci, 1883.

‡ The method of investigating this condition is not without interest. The vesicular structure of the lung was injected, through the bronchi, with a resinous melted mass, which, on cooling, presented molds of the bronchioles, in connection with their characteristic infundibula and acini.

* Loc. cit.

patient in the early stage of the fever might cause a diarrhœa which would continue throughout the attack. Is there no reason for this belief, and is not calomel capable of producing the same effect? Dr. Wilson says the treatment of typhoid fever is at sea; to me it seems on the contrary that there is no disease in regard to the treatment of which there is such general agreement. How many men in this room treat cases of scarlet fever alike, and how many treat typhoid fever differently? The present treatment of the disease is the treatment of common sense; so far as the local lesion is concerned, we treat it as a surgeon treats a wound—we try to give the part rest, and avoid all causes of irritation, and nature thus is given time and opportunity to heal the ulcers. We treat symptoms as they arise, and support the strength of the patient with food and water, and stimulants if necessary, through the four or six weeks during which fever is burning his tissues until he is reduced almost to a skeleton. Now, can purging with calomel, or administering such nauseous drugs as carboic acid and iodine, conduce to this result? Will the patient be any better able to go through his weeks of fever? Does Dr. Wilson show that the method shortens the duration of the disease one day, or one hour? It appears like asking us to go back to the days of ignorance, which existed before Stokes, and Graves, and the great men of that day, taught us how to treat the disease. Years ago Stokes put in a few words the common-sense view of the question. It must be remembered that at that time distinction between typhus and typhoid fevers was not drawn. He says: "I confess that it was not until several years after I commenced practice that I became fully aware of the erroneousness of what is termed the anatomical theory of disease; and I feel certain, humiliating though the confession may be, that the fear of stimulants in fever with which I was imbued, was the means of my losing many patients whose lives would have been saved, had I trusted less to the doctrine of inflammation, and more to the lessons of experience, given us by men who observed and wrote before the times of Bichat or of Hunter.

"The hospital physician will be frequently asked by students to state the principle on which he administers wine in fever. Typhus fever is a disease which has a tendency to a spontaneous and favorable termination, but one in the course of which the powers of life are attacked by a most malignant influence. By wine, food, and other stimulants, we support nature until the struggle is past, so that, to use the words of an ancient author, which embody a more profound principle than appears at first sight, we 'cure the patient by preventing him from dying;' that is to say, we prolong his existence until the natural and favorable termination of the disease arrives. We do not allow our patients to die of exhaustion, and bearing in mind the depressing influence they have to struggle with, we give stimulants at the proper time and with a bold hand. We give our patients an artificial life till the period arrives when nature and health resume their sway."

If we are asked to try the method because it lessens the death-rate, I think that can hardly yet be considered as proved. The number of cases recorded by Dr. Wilson is yet too small to prove

any point. In looking over some old lectures of my father, the late Dr. J. Forsyth Meigs, delivered about the year 1850, I found that he reported a series of sixty-nine cases treated in private practice, and only five deaths. This makes a death-rate of 7.24 per cent., while Dr. Wilson's series of thirty-two cases and two deaths makes the death-rate 6.21 per cent. The number of cases treated by him is less than half. The cases reported by Dr. Meigs were treated when bleeding and purging were still customary, and even his results are but little inferior to those of Dr. Wilson, and both are infinitely better than any published hospital statistics. In the first thirty-nine of Dr. Meigs's series of cases he had four deaths; but in the thirty coming afterwards, only one death occurred. These results bear comparison with Dr. Wilson's, particularly the second series, which came after the first, and when bleeding and purging were becoming less the medical fashion of the day, and the expectant plan was more pursued. A comparison of the first and second series of cases shows how little reliance is to be placed upon deductions drawn from the treatment of such small numbers; for in the first the death-rate was 10.25 per cent., while in the second it was only 3.33 per cent. An examination of such records as I possess enables me to recall twenty seven cases I have treated in private practice. Of these, two died, making a death-rate of 7.40 per cent. One of the deaths was of a boy who was taken sick in a house where there were eight or nine cases of diphtheria and diphtheritic sore throat, almost every one living in the house at the time being more or less affected—the cause being a foul, leaky brick drain which ran through the cellar. The other death was of a man about fifty years of age, in whom the diagnosis was not made until about the end of the second week of the disease. During the first two weeks he was in and out of bed, and made at least two journeys of sixty or seventy miles by rail, and finally died of perforation of the bowel and peritonitis, which were found at a post-mortem examination. If the total number of cases reported by Dr. Meigs and my own be considered together, there were treated in private practice ninety-six cases with seven deaths, making an average death-rate of 7.29 per cent—not a bad showing for the old treatment, when it is considered that typhoid fever has always been looked upon as one of the most fatal of all diseases.

Selling His Practice.

A physician sold his practice, and agreed not to practice "in that city or its vicinity." He broke this agreement, and his successor brought suit for an injunction, which was granted to him generally. The case was carried to the Supreme Court of Michigan, where the decree was confirmed. The Court defined the term "city or its vicinity" to include the territory surrounding the city for the distance of ten miles from its corporate limits. "The extent of territory, in the matter of doing business, included in the term 'vicinity of the city,' must necessarily depend in a great measure upon the size of the city, its location, and particular surroundings."

EDITORIAL DEPARTMENT.

PERISCOPE.

Koch on Cholera.

The *Lancet*, February 23, 1884, says:

Our Berlin correspondent has favored us with the following Fifth Report of the German Cholera Commission, which he correctly says is of such importance that it does not permit of abridgment. Dr. Koch writes from Calcutta, January 7:

"As a sequel to my report of December 16 last concerning the work of the Cholera Commission in Calcutta, I have the honor of sending to your Excellency the following account. The Commission has been gratified with the lively interest and active support given by the local and hospital authorities in this city. Nearly all fatal cases of cholera in which dissections were made the city hospitals were thus available for our researches. Up to the present time the material has been collected from nine post-mortem examinations, as well as from eight living individuals, suffering from cholera. The cases following each other in almost equal intervals, the time was just sufficient for a thorough examination in all directions. Some cases, ending fatally after a short illness and uncomplicated with other morbid conditions, furnished the best material for examination, as post-mortems could be made soon after death. To these favorable conditions it is due that the Commissioners have been able to make essential progress in the advancement of the work entrusted to them. Microscopical examination in all cases confirmed the existence of the same bacilli in the cholera intestine, which had been found in Egypt. However, in my report of September 17, I was obliged to leave it undetermined whether these bacilli do not belong, like so many other bacteria, to the regular parasites of the human intestine, which under the influence of the choleraic process are enabled to penetrate within the mucous membrane. At that time sufficiently marked characters were still lacking for distinguishing these bacilli from other intestinal bacilli of a very similar shape. But this want has now fortunately been supplied; for with the aid of the methods pursued by the Board of Health, which have also proved most reliable on this occasion, we succeeded in isolating the bacilli from the intestinal contents of the least complicated cases of cholera, and in cultivating them in pure cultures. A minute observation of the bacilli in these pure cultures has led to the discovery of some very characteristic peculiarities as to their shape and mode of growth in gelatine, by which we have been enabled to distinguish them with certainty from other bacilli. We had now the means for definitely deciding the question whether these bacilli belong to the ordinary inhabitants of the intestine, or whether they exclusively occurred in the intestine of individuals suffering from cholera. For this purpose, again by aid of the gelatine cultures, we endeavored to demonstrate the bacilli in the choleraic discharges and in the intestinal

contents after death from cholera, in which task we succeeded in all the cases examined in this city. On the other hand, a similar examination of the intestinal contents in other diseases gave evidence that the bacilli met with in cases of cholera were invariably absent. Thus far the research has been carried out on the bodies of six cases of pneumonia, dysentery, phthisis, and kidney disease. Nor has it been possible to find bacilli similar to the cholera bacilli anywhere in the intestinal contents of animals, and in other substances abounding with bacteria.

"If these observations should be confirmed on further investigation, a very important result will have been gained. Indeed, if these bacilli, endowed with specific properties, belong quite exclusively to the cholera process, the etiological connection between the prevalence of the same and the cholera would barely admit of doubt, even if the reproduction of the disease in living animals should fail. But in this latter respect things seem to be in our favor, since several experiments recently made on animals have given results which allow us to hope for further success. Besides these experiments, the Commission has been occupied with getting the best possible information about the behaviour of cholera in the city of Calcutta. In cities outside of India, which are only exposed at long intervals to cholera infection, it is impossible to make out with certainty the influence exerted on this disease by sanitary improvements, such as the supply of good drinking water, drainage of the soil, etc., since it must always be a matter of chance whether such a locality be once or often the seat of the disease. But in cities like Calcutta, which every year have a high mortality from cholera, each measure that operates successfully against the disease must be followed by a more or less remarkable and lasting decrease in the mortality. As a matter of fact, in Calcutta the cholera has decreased in a striking manner since 1870. Before this year the annual average mortality was 10.1 per 1000 inhabitants. Since 1870 it has fallen to 3 per 1000, or more than threefold. This fact, deserving the utmost attention, must carry indications on the most successful means of attacking the disease. The physicians of this city nearly all agree in the opinion that the decrease of the cholera is solely owing to the introduction of a drinking-water supply. It will be an important business for the Commissioners, by personal study and inspection, to arrive at an unbiased judgment on this point. For this end they have visited the waterworks as well as the sewage arrangements of Calcutta. A number of samples of river water, before and after infiltration, in the waterworks of Puttah, have also been examined, and the drinking water supplied to the city has been found of excellent quality.

"I learn from the medical journals that the French Commissioners sent to Egypt to investigate cholera declare in their report that they have gained other results than those communicated by myself, having found organisms in the blood al-

leged to be peculiar to cholera. Since this might give rise to the impression that the researches of the German Commission were going in a wrong direction, I think it necessary to state to your excellency my views upon the above statements. In the blood of the healthy man, besides red and white blood-corpuscles, there exist, in varying numbers, small, roundish, pale elements, the so-called blood-plates (*Blutplättchen*). In some febrile diseases—typhus fever and pneumonia, for instance—these elements are greatly multiplied, and, in consequence of their resemblance to micro-organisms, have been repeatedly taken for bacteria. In the blood of individuals suffering from cholera, and of those who die from this disease, they are almost always increased, as we were able to ascertain in the cases of cholera examined by us. This fact, after all, is not a new one, having been already mentioned by former investigators. Dr. D. Cunningham, for instance, as early as 1872, in his 'Microscopical and Physiological Researches into the Nature of the Agents producing Cholera,' has given a very good figure of these formed elements of the choleraic blood. Now, since even the most approved methods of examination do not permit of the recognition in the cholera-blood of any other elements similar to bacteria, and since the description given by the French Commission corresponds in every way with the above-mentioned blood-plates, I cannot but argue that the French Commissioners, falling into the same error as previous investigators, have mistaken the 'Blutplättchen' for specific organisms. Any etiological connection with cholera cannot be ascribed to these blood-plates, because, as I already mentioned, these elements are also met with in the blood of healthy individuals, and others suffering from other diseases."

Since the publication of the above, a telegram from Calcutta announces that Drs. Koch, Fischer, and Gaffky have discovered the cholera-bacillus in a water tank.

Physostigma and Eserine in the Night-sweating of Phthisis.

Dr. William Murrell thus writes in the *Practitioner*, December, 1883:

On theoretical grounds, it might be supposed that physostigma would be useful in the treatment of sweating. It is allied in its physiological action to jaborandi, pilocarpin, and muscarin, whilst it is antagonized by atropin, daturin, hyoscyamin, and homatropin.

I have used physostigma and the salts of its alkaloid in the treatment of the night sweating of phthisis for nearly two years, and have notes of over fifty cases. Of these, thirty-three were males and seventeen females. Of the adults, thirty-eight were between the ages of twenty and thirty-nine. The oldest patient was forty-nine, the youngest was a girl of four. They were all out-patients at the Royal Hospital for Diseases of the Chest, and they were all suffering from phthisis. Their symptoms were those usually met with in these cases—cough, expectoration, more or less hæmoptysis, loss of flesh, and night-sweating. With regard to physical signs, all stages of the disease were represented; in some there was simply consolidation, others had moist sounds

over the chest, and in others, again, the indications of the existence of a cavity were apparent. The sweating was in every instance profuse, only well-marked cases being selected for observation. It is hardly necessary to say that whilst the physostigma was being taken no other treatment was adopted. The only exception to this was in the case of cod liver oil. If the oil had been taken continuously for some time, it was thought better to allow the patient to go on with it, rather than to introduce a disturbing element by discontinuing its use.

Of the fifty cases, thirty-four were treated with physostigma itself. The preparation was the extract, the dose one-tenth of a grain made into pilules with sugar of milk. In ten cases one pilule only was given at bedtime, and in eight of these, the sweating was completely arrested by the fourth or fifth night. Of the two cases of failure, one was relieved by two pilules of physostigma at bedtime, and the other by a twenty-grain dose of agaric. In twenty-four cases the physostigma pilules were given three times during the night, and this gave even better results. In most cases the sweating was checked the first or second night, and in every case it had almost ceased by the end of the week. In some cases, where there was profuse sweating during the day as well as at night, a pilule was given every four hours. The dose is too small to produce "untoward effects," and no hesitation need be felt in repeating it frequently. The sweating once stopped, does not, as a rule, return for three weeks or a month, but at the expiration of that time it is usually necessary to resume the treatment. In two cases in which the physostigma failed to act promptly, Shoemaker's oleate of zinc was used as a dusting powder at bedtime with excellent effect. This new oleate is a beautiful greyish-white soft powder; but as it has a slight, though hardly perceptible, odor, it should be prescribed with the addition of $\frac{1}{100}$ part of thymol. The combination is a pleasant one, and succeeds admirably, not only in excessive sweating, but as a remedy for many acute and irritable skin diseases.

I have used three salts of eserine—the hydrobromate, salicylate, and sulphate—and all three answer equally well. The dose best adapted for the treatment of excessive sweating is the sixtieth part of a grain, and this may be conveniently made into pilules, one to be taken three or four times during the night. In fifteen consecutive cases in which I gave them I had no failures, although it is hardly likely that this mode of treatment will succeed in every case.

Physostigma is undoubtedly a good remedy for excessive sweating, but there is no reason to suppose that it will take the place of other and better known modes of treatment. It may be said that we have now so many remedies for sweating, that practically it is not desirable to extend the list. This may be true; but on purely pharmacological grounds the use of Calabar bean to check sweating is of interest.

In one case of phthisis I gave the patient at intervals six hypodermic injections of a sixtieth of a grain of sulphate of eserine. The temperature was taken every four hours for six weeks, but I could not see that it influenced it in any way.

The Treatment of Bright's Disease.

From an article by Dr. N. M. Baskett, in the *St. Louis Courier of Med.*, January, 1884, we note as follows:

The diagnosis being made, the question of treatment occurs; and I shall give my own plan of treatment. Most of the authors object to the use of mercurials in Bright's disease, because the system is so easily ptyalized. This may be true, but in the acute form of the disease I consider them the most reliable agents we have for its successful treatment. I always use them, and have never yet salivated a patient. My usual plan, if there is much œdema, with impeded heart-action, is to give the following recipe:

R.	Hydrarg. chlor. mit.,	gr. ss.
	Sodi bicarb.,	grs. ijss.
M.	Ft. chart No. j.	
S.	One powder twice a day.	

In conjunction with this, I give night and morning:

R.	Potass. bitart.,	ʒj vel jss.
	Jalapœ pulv.,	grs. viij.
	Gambogia pulv.,	gr. j.
M.	Ft. chart No. j.	

Should this not cause an elimination of the watery elements rapid enough, and there is danger of uremic coma or apoplexy from retardation of the blood, I add:

R.	Pilocarpin muriat.,	gr. j.
	Sacchari lactis,	grs. x.
M.	Ft. chart No. x.	
S.	One three times per day.	

For the action of the heart and system, I use the following tonic, varying the ingredients to suit the exigencies of the case:

R. Potass. iodid.; tinct. digitalis; syr. squills; liq. ammon. acetat.; fl. ext. phytolac dec.; syr. sarsap. comp.

These ingredients, given according to the age and condition of the patient and the effect desired.

Under this treatment my acute cases have always improved rapidly. I have always seen a cessation of the graver symptoms in a few days. Of course I do not continue the mercurials long after the dropsy is subdued. But I have frequently found it necessary to return to them when the symptoms manifested themselves, and always with benefit.

In the chronic condition, the most that can be done is to keep the bowels regular and build up the system with tonics. For this purpose, I find nothing better than the comp. jalap powder, the alterative mixture mentioned above, and a teaspoonful of the ferri nitrogeniz. comp., as manufactured by Chapman, Green & Co. This to be taken three times per day, after meals. Occasionally I find it beneficial to give the powders of pilocarpin three or four days in succession.

With these measures, these patients will enjoy a fair degree of health, and be able to attend to the lighter forms of labor. In the last two years I have attended five cases of acute and chronic albuminuria. None of these patients have died of the disease. One of them, an old gentleman, sixty-seven years of age, died a few weeks ago of capillary bronchitis, with which he had suffered for years.

The question of dietetics during the disease is discussed by many writers. Of course, I always

caution my patients to avoid indigestible food. Anything disagreeing with them in health will certainly disagree during the disease. But beyond this I do not limit them. Some authors condemn the use of albuminous foods, which, to me, seems a great mistake. Albumen is essential to life. The waste going on in the system can only be supported by a constant supply of material. If it is not furnished with the food, the tissues of the system will be broken down to supply it. In fact, it is highly probable that the albumen is supplied from tissues of the system. Let the patient eat, then, anything which agrees with his digestive apparatus, and trust to the recuperative powers of nature and proper remedial agencies to eventually re-establish a normal equilibrium.

The Organic Phosphorus in Urine.

The *Lancet*, January 5, 1884, says: Glycerin-phosphoric acid has been found in the urine in leukæmia and in certain cases of chyluria, and there is now reason to believe that in extremely minute quantities it is a normal constituent of urine. Sotnischewsky has shown that if the phosphoric acid in urine be estimated in the ordinary way, after the urine has been boiled for some time with strong nitric acid, the amount of phosphoric acid indicated is more than that of the same urine which has not been so treated—the inference being that the boiling with nitric acid oxidizes the phosphorus in combination with organic matter in the urine. Zuelzer confirms Sotnischewsky, and, in addition, has made a series of observations on healthy animals under varied conditions of diet, etc., and also in various diseases in man. He finds that the amount of what for convenience we designate organic phosphorus is extremely small in healthy individuals on ordinary diet, but that it is considerably increased by feeding with brain substance and fatty matters. The morbid conditions in which the most marked increase occurred was in a case of dementia, and in several instances after the administration of chloroform. In a case of diabetes, the amount found was also considerable. These observations are of interest as being likely to elucidate several obscure points with regard to the tissue metamorphosis that occurs in nervous diseases. Hitherto the evidence obtained by an estimation of the phosphates in these diseases has been disappointing, and of a negative character. But if, as is very likely, the phosphates present in urine only represent the normal tissue metabolism of the body generally, and the glycerin-phosphoric acid that of the phosphorized constituents of the nervous system, then it is not a matter for surprise that our labors in the past have been so unsatisfactory, since we have not recognized the possibility of phosphorus being found in the urine in this form. In future investigations it will be necessary to determine both separately, and to clearly express their relationship. When this has been done in a series of cases, there can be little doubt that we shall be able to discriminate between the increase of phosphoric acid due to general tissue metabolism and that caused by disturbances of nutrition in the nervous system, and thus elucidate the mysterious rôle played by phosphorus in the organism generally.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—A case of multiple sarcoma of the skin, closely resembling leprosy, is described in a brochure by Dr. James Nevins Hyde, of Chicago.

—An interesting pamphlet on the therapeutic uses of peroxide of hydrogen, especially in diphtheria, has appeared from the pen of Dr. R. J. Nunn, of Savannah, Ga. He records some striking observations, and certainly this curious agent merits closer investigation.

—There are 50,000 insane persons in the United States not in asylums. How they should be cared for is one of the main questions of an essay by Dr. Samuel Ayres, of Pittsburgh. He stigmatizes as a mistaken idea the one which so generally prevails, that because a person is insane he must be sent to an asylum. Insanity in its forming stage may be easily cured, and there is no necessity for inflicting upon patient and family the mortification and grief of asylum confinement.

—A case of epithelioma arising from local irritation is recorded by Dr. J. Solis Cohen in a late reprint from the *Laryngological Transactions*.

—In a reprint from the *Columbus Med. Jour.*, Dr. W. H. Phillips writes an article in favor of the more extended employment of hydrotherapy. His suggestions are timely, and his points well taken. He shows that the good results do not depend on any curative element in the water, but on its intelligent application as an alternative, detergent and stimulant.

BOOK NOTICES.

A Year-Book of Surgery for 1883. Edited by Charles H. Knight, M. D. 8vo., pp. 147. Price \$1.50.

A Year-Book of Therapeutics for 1883. Edited by R. W. Amidon, M. D. 8vo., pp. 247. Price \$1.50. G. P. Putnam's Sons, N. Y. City.

We cannot speak with much commendation of these compilations. It is not obvious what use they subserve. Made up, as they are, from extracts more or less condensed from a few leading journals, they are a poor substitute for the quarterly or semi-annual abstracts published, which can be had for less money, with more frequent issue, and containing more matter, at least as well arranged. The Year-Book of Surgery has no index, that of Therapeutics but a slight one,

which does not name several important additions to our remedial resources within the time included.

A Plea for the Cure of Rupture; or, The Pathology of the Subcutaneous Operation by Injection for the Cure of Hernia. By Joseph H. Warren, A. M., M. D. Boston: James R. Osgood & Co.

The author of this monograph explains in a series of short chapters the method he employs for bringing about obliterative inflammation in hernial protrusion by deep injections. He answers the questions which would be apt to suggest themselves to surgeons, and cites a number of cases.

The Veins of the Brain and its Envelopes, their Anatomy and bearing on the Intra-Cranial Circulation. By William Browning, M. D. F. B. O'Connor, jr., Brooklyn, N. Y.

This anatomical and pathological study has been carefully carried out, and the author deserves credit for the thoroughness of his researches. The topic is one intimately associated with important pathological and clinical facts, and this has been borne in mind and frequent applications made.

Report of the Secretary of the State Board of Health of West Virginia for 1881-3. Wheeling, Va.

In this volume of 300 pages a large amount of useful information is condensed. Besides the proceedings of the Board, a number of special pages are inserted from competent hands on topics of value to the public, and generally put in such language as can be understood by ordinary readers. Thus some sensible advice is given on nursing the sick, on preventing malarial disease, on the care of the eyes, on ventilation, on the use of tobacco, etc. Although the profession may not find much that is new, the people at large cannot be too often or too thoroughly instructed on these points of daily hygiene. There are also some well-prepared articles on veterinary medicine and a number of pages of statistical information.

The Pathology and Treatment of Gonorrhœa. By J. K. Milton. Fifth edition. Wm. Wood & Co.

The work of Mr. Milton is a sensible one, based on personal observation in a great city (London), and expresses opinions little due to echoing the words of any master. Hence, while his treatise is fresh, readable, and suggestive, he has an arbitrariness of judgment, a positiveness of praise and condemnation, against which the younger reader should be on his guard. Few will be disappointed in its perusal, and none can fail to derive many useful hints from his pages.

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THE NEW YORK STATE MEDICAL ASSOCIATION.

In a pamphlet of 43 pages, this Association, "founded February, 1884," assigns the reasons for its existence, and reports the proceedings of its first annual meeting.

As the profession knows, it was a question of "Code" or "No Code." The disreputable manner in which a conclave of New York city specialists managed to gain control of the New York State Medical Society, and commit it to action destructive of professional honor, is set forth in clear terms. It is proved that on a fair and full vote both the membership of the Society and the profession of the State of New York are opposed to the position of the State Society by a heavy majority. As Dr. Austin Flint remarked:

"The 'New Code' in effect removes the barrier dividing members of the regular profession from irregular practitioners; and, in this point of view, it is the sentiment of a large majority of the medical profession of the State, that the adoption of the 'New Code' will prove greatly detrimental to the honor, the interests, and the usefulness of the profession."

Nothing is more true than these words. No action is more certain to degrade the profession in the eyes of the public, and in the understanding of sound-thinking men, than this deliberate overthrow of the barrier between the regular, scientific practitioner, and every ignorant quack who manages to hold a diploma.

The physicians of New York, those who respect the honor and welfare of the profession more than some few consultation fees, have done well to cut loose from a clan of specialists, who have at heart only their own profit as a motive of action, and to it are willing to sacrifice not only their professional honor, but the honest sense of the Medical Society of their State.

One remark of the chairman of the meeting, Dr. H. D. Didama, we take occasion to quote:

"One other matter is worthy of consideration. The remarkable activity of a few leaders of the minority is well known. They have been aided by certain medical journals in New York and elsewhere. These journals, in violation of all sense of propriety, have received our money for their support, and have then, week after week,

thrust their misrepresentations, their boasts, their puerile arguments, and their pitiful sophistries, into our unwilling faces.

"I need not intimate that there is a remedy for this evil also; that there are medical journals, able and deserving our support, and disposed to give us at least civil treatment."

We have observed the fact here stated—the singular warmth of certain journals for this ill-advised movement. By so doing they are working a personal injury to every one of their subscribers, except, perhaps, specialists in large cities, and these will feel it sooner or later. They should be made to see that they do not represent the opinion of the profession, and that their course is one destructive of its best interests.

ALBUMINURIA VS. BRIGHT'S DISEASE.

A few years ago, when albumen was detected in the urine, a diagnosis of Bright's disease, and a very gloomy prognosis was the consequence. Albuminuria and Bright's disease were usually regarded as but different names for the same disease, for a serious degenerative disease of the kidney. Now, all is different, and while the majority of physicians realize that albuminous urine does not necessarily imply kidney disease, yet there is a tendency among many, in their practice, to ignore this fact, and oftentimes to give a hasty diagnosis and prognosis, based upon the presence of albumen, and which the subsequent history of the case fails to substantiate.

Albuminuria may be the result of many causes, among which, for the purposes of illustration, may be cited a temporary congestion of the kidney, as from suddenly plunging into cold water (for a distinguished English authority has recently stated, that he believes that if the urine were examined immediately after coming out of an ocean bath, that of nearly every one would be found to contain albumen, a transient albuminuria being produced by action of the cold water on the body, determining the blood to, and causing a temporary congestion of the kidneys), faulty digestion, by which according to Semmola, the albumen of the blood, instead of being nutritious, is excrementitious, and is removed by the kidneys.

These two instances will suffice to point the statement with which, as has been said, we are already familiar, that albuminuria does not necessarily imply Bright's disease. What then, you may ask, does indicate degenerative kidney disease? We must answer, that the diagnosis of Bright's disease is, to-day, one of the nicest problems in diagnosis that the physician can have presented to him. There are no absolutely pathognomonic signs, since all of the usually accredited symptoms may be present when the disease is absent. We can, however, in very many cases form a fairly accurate opinion; but it would take much more space than we can afford, to clearly elucidate this question. In view of the increasing prevalence of this disease, of its insidious nature, of the difficulty of diagnosis, and of its subservency to hygienic laws, we know of no more important reading for the general practitioner than a good, recent work on this subject, for the views of to-day are altogether different from the views of ten years ago. The point that we wish particularly to emphasize, and to do so we will repeat, is that albuminuria does not mean Bright's disease, and that he who makes his diagnosis solely on this symptom will be repeatedly doomed to disappointment.

PIGMENTATION AND DISEASE.

One of the oldest divisions of the human race was that by color—the white, the yellow, the red, and the black varieties. To this day physiologists are not agreed as to the proximate causes of the variation in the amount of pigment deposited in the epidermic cells and in the hair. It is probable, as some have maintained, that it bears a definite relation to lung capacity; the more complete aëration of the blood in races of ample pulmonary development enabling them to throw off the carbon by the lungs, while in races of diminished lung power, notably the negroes, this carbon being retained is deposited on the surface of the skin.

Certain it is that a large group of diseases stand related in frequency and severity to the amount of pigmentation observable.

Quite recently Prof. ALEXANDER GRAHAM BELL has commented on this fact with reference to some nervous diseases. Deafness is more common among whites than among negroes. Many deaf mutes have a peculiar pallid complexion. Epilepsy is decidedly a disease of the white races. Even in lower animals this holds true. Mr. LAWSON TAIT and others have observed both epilepsy and congenital deafness in white cats, and only in such as are white. He adds: "Every kind of white animal I have kept as a pet has been the subject of epilepsy."

The general rule may be laid down that in white races, and in those members of dark races who become white—to wit, albinos—diseases of the nervous system and of the liver are more marked both in frequency and severity; while in dark races, the affections most common and fatal are of the lungs and bowels.

This rule is based on observed anatomical and physiological facts, such as the greater complexity of the cerebral convolutions in whites, the smaller lungs of negroes, their proportionately more active livers, the brevity of the intestinal canal, etc.

It would be interesting to collect further observations on this racial nosology. Though the literature on it is not scanty, it is as yet insufficient to enable us to explain the problems presented with satisfaction. In this country there is an unusually fine field for observation, as the three races are in many parts side by side under the same conditions of life.

THE M'GINNIS CASE AND PROFESSIONAL EXPERTS.

This case, which has been recently brought to a termination in this city, after a most protracted experience, is in some respects a noteworthy one. This man was condemned to death for the murder of his mother-in-law, and he has been hung under circumstances that do not seem altogether as they ought to be. His counsel recommended to the Governor of the State that the prisoner was of unsound mind, and requested a commission in lunacy to examine into and report upon his mental condition. Such a commission was appointed,

and upon it were two physicians who have extensive reputation as alienists, and among the balance one distinguished surgeon. After deliberating, the commission united (with one single exception) in saying to the Governor that they believed the prisoner of unsound mind. This one dissentient was, as we have said, a surgeon, whose only qualification to pose as an expert in such cases is to be found in the fact that he married the daughter of a distinguished alienist. The minority report of *one* was received and acted upon, the Governor refused to interfere, and the man was hung. Extended comment is unnecessary; he who runs may read how ridiculous this case must make the usual methods of expert testimony appear to any sensible person.

NOTES AND COMMENTS.

Neuropathic Plica.

This singular condition is well illustrated in a case reported by Dr. J. F. Le Page, in the *Brit. Med. Jour.*, January 26, 1884:

"J. H., aged seventeen years, consulted me on September 30, 1882. She stated that for six or seven days she had felt ill, complaining of more or less general numbness; and that, on September 29, she suffered the whole day from severe headache, which affected chiefly the brow, together with the sensation of 'pins and needles' over the scalp. In the hope of obtaining relief, she, in the evening, washed her head in warm, but not hot, water. After partially drying her hair, which measured three feet one inch in length, with a towel, she commenced combing it out on the left side, in the presence of her parents, who are intelligent and reliable people, and, whilst so engaged, she felt a tearing sensation on the right side of her head, as though the hair were being pulled out, and, on placing her hand to her head, found that it was being drawn up. In one or two minutes nearly the whole of this long hair on the right side of the head, was drawn into a hard lump. The parents, who witnessed this extraordinary phenomenon, spent a great portion of the night in a fruitless attempt to untangle the mass. The few hairs combed out were spread on her pillow while she slept; but afterwards most of them were found to be drawn up as before, although not tangled as was the larger mass.

On examination, I found the hair on the left

side of her head quite smooth, very slightly waved, and not in the least tangled nor drawn up. On the right side, extending to nearly the median line behind and to within an inch of the forehead, the whole mass was contracted to a hard tangled lump, which it appeared impossible to unravel. My patient's parents refused for some days to allow me to cut off the hair, as they, to use their own words, considered it 'a visitation from God.' On closer examination, I found that, under the superficial portion, the arrangement was strikingly peculiar, the hair being looped and festooned in a way which I might even describe as beautiful. Under the microscope, individual hairs appeared quite natural, but a very significant fact is brought to light; all the hairs which are contracted, closely curled, and intertwined, are, more or less, flat hairs, whilst those which are looped and festooned are round. Viewed without the microscope, it is at once evident that no dexterity could have produced the most remarkable condition—a condition which art could not produce. Menstruation commenced when she was sixteen, and was irregular until six months before she consulted me. Since that time she had not menstruated. Her appetite was fairly good; her habits were sedentary."

Puncture of the Aorta.

The following case possesses sufficient medico-legal interest to allow Dr. T. Pagan Lowe (*Brit. Med. Jour.*, March 8, 1884,) to tell it in his own words: "A few nights ago, I was called in haste to see a man who had been stabbed in a public house. I found the man dead, and learned from the bystanders that, about ten minutes before, he had been stabbed in the neck. Immediately on receipt of the blow, he exclaimed, "I am stabbed," and fell back into the arms of a man near him. He did not speak again, and died in about four minutes. On examination, I found a small triangular punctured wound situated on a level with the upper border of the sternum, just internal to the right sterno-clavicular joint; it measured three-quarters of an inch in one direction, and about half that in the other. A few drops of blood represented the whole of the hemorrhage that had taken place externally. At the necropsy the following day, I found that the weapon, which was a common pruning-knife, had taken a direction downwards and backwards, entering the thorax between the cartilages of the first and second ribs, notching the sternum. It had perforated both layers of the anterior fold of the right pleura, entered the pericardium on its

upper aspect, and penetrated the anterior wall of the aorta one inch from the valves. Blood had been poured out in huge quantities, filling the pericardium, and finding its way along the track of the wound into the right pleura, which it had about half filled. No other important structures were injured.

"The small amount of external hemorrhage is a notable feature in the case. It is easily accounted for. The skin-wound, owing to the direction of the blow downwards, was valvular, and retracted upwards as soon as the knife was withdrawn. Some impediment in this way was offered to the outward escape of blood; but the chief factor in its prevention was the laying open of the right pleural cavity, into which the hemorrhage had free vent. This latter circumstance would also tend to relieve the distension of the pericardium, and thus account for the length of time the patient survived such an injury."

Epithelioma of Penis; Amputation; Transplantation of Urethra through the Perineum.

As of interest in connection with the two similar cases that we have recorded, we note the following instructive case from the *Lancet*, January 12, 1884:

F. T., a baker, aged fifty-two, was admitted into hospital July 16, 1883. He declared that he never had any chancre or clap. Nine months ago he noticed a small tumor about the size of a pea on the under part of the glans, close to the frænum preputii. In a month's time the growth was as large as a hazel-nut, and he began to suffer from the most painful priapisms. Up to four months ago, he had been able always to uncover the glans penis.

The day following his admission, Mr. Storrey slit up the foreskin, and removed a growth about the size of an ordinary hazel-nut, together with a portion of the glans penis from the under side of the penis.

In a fortnight the patient was made an out-patient; but he presented himself in about six weeks' time with a return growth, and with some considerable infiltration of the penis. His great complaint was his terrible suffering at night from painful erections. There were no enlarged glands in the groin. Mr. Storrey, under ether, amputated the penis, after the method adopted by Prof. Thiersch, a short account of which is given in the May number of the *British Medical Journal* for 1878. The urethra was dissected out and transplanted through a hole in the perineum, and a drainage-tube was passed through the whole

length of the scrotum. Within twenty-four hours the scrotum filled with blood, which caused the stitches to give way, and, of course, delayed union. At the end of six weeks from the date of operation the patient was discharged, with the wound almost healed, passing his urine easily and comfortably through the hole in the perineum, to the edges of which the urethra was attached. Three months after the operation he appeared at the hospital to show himself, having gained in flesh, and feeling "a new man," as he expressed himself, declaring he had no pain whatever, and could pass his urine with great ease and comfort, although he was obliged to take down his trousers altogether to micturate.

Direct Pulmonary Therapeutics.

A foreign correspondent of a contemporary says that at a recent meeting of the Académie de Médecine, M. Sandras objected to treating bronchitis, laryngitis, and colds, by entrusting therapeutic agents to the stomach and intestinal canal. The drug thus administered is absorbed, passes into the circulation, and reaches the organs requiring treatment after a very roundabout journey, even if it do not lose its way there. M. Sandras recommends that the laryngeal and pulmonary mucous membranes be acted upon by direct inhalation of the vapor of turpentine and tar. The necessary apparatus consists of a bottle with a cork presenting two orifices. An India-rubber tube is passed through one of the orifices, with its end at a little distance above the level of the fluid in the bottle. Another tube is passed through the second orifice; this is in communication with the air, and is passed into the fluid. The bottle is half-filled with a mixture of chloroform, ether, and turpentine, or with 100 grammes of turpentine poured on to twenty grammes of Norwegian tar. The inhalations should take place three times a day, and be kept up for five minutes, at the rate of fifteen to twenty inspirations a minute. M. Sandras asserts that this treatment rarely fails to cure coughs, and all the unpleasant complications attending colds and bronchitis.

A Word Against Jequirity.

It seems that Parisotti and Galewski ("Revue d'Ophthalmologie," August, 1883,) have not succeeded as well with infusions of jequirity in the treatment of granulations as Wecker and others have. They obtained their infusion of the beans from the same pharmacist who furnished Wecker with his infusions; and they employed it with rigid regard to the directions given by

Wecker; but they produced only negative results. They noted the appearance of a completely smooth surface of the conjunctiva where the granulations had been, but at the end of two weeks the lids had almost regained their normal thickness, and the granulations had remained completely intact. If the conjunctival surface be examined before the swelling has entirely disappeared, there will be seen a united, almost glistening surface, resembling cicatricial tissue, but which is only caused by the swelling of the tissues. During this period the granulations remain concealed by the swelling of the mucous membrane; but, as soon as the inflammation has completely disappeared, the granulations will be found in their primitive state, without having undergone any modification. Moreover, they think that this method of treatment is not without danger to the cornea, which may be even entirely destroyed.

Turpentine as a Prophylactic in Infectious Diseases.

The *Med. Record* tells us that H. Vilandt writes in the *Ugeskrift for Læger*, vol. viii., No. 8, 1883, concerning the value of the oil of turpentine in the treatment and prophylaxis of diphtheria and the exanthematous diseases. He states that he has never seen any of these diseases spread from a sick child to other members of the family when this remedy was employed. In many of his cases no isolation could be attempted, as the mother was the only female in the family, and was obliged to take care of both the sick and the well, continually passing back and forth from one to the other. His method was to pour from twenty to forty drops of a mixture of equal parts of turpentine and carbolic acid into a kettle of water, which was kept simmering over a slow fire, so that the air of the sick-room was constantly impregnated with the odor of these two substances. He claims also that by this means a favorable influence is exerted upon the exudation in diphtheria, although it is by no means curative of the disease, and should never be relied upon to the exclusion of other remedies.

Examination of Fæces of Infants.

Dr. N. A. Randolph, of this city, has made some noteworthy observations on the fæces of starch-fed infants, and the fæces of infants after inunction of cod liver oil. On the former he reaches the following conclusions:

1. That many infants under three months can digest starch foods.
2. That the individual variations in this regard

are so numerous that no broad and general statement can be made as to the period at which infants *begin* to digest starches ; and,

3. That the physician can be absolutely certain that a farinaceous ingredient in the diet of a young infant is beneficial, only by an examination of the dejecta under such diet.

Of inunction he found that in eighty per cent. of the cases a notable increase of the fatty matters passed per anum was observed after the persistent inunction of cod liver oil. In the remaining twenty per cent. the quantity of faecal fats was unaltered by the treatment, and in one case remained negative throughout.

Social Relations of Inebriety.

Some conclusions on this subject reached by Dr. Crothers, of Hartford, are as follows :

1. Inebriety as a disease was noted in antiquity, and has ever been considered a form of insanity, marked by a progressive march or order of events, from certain physical causes, on to death.

2. The march of inebriety is in waves and currents, controlled by some unknown law, clearly within the range of a wider knowledge to prevent and remedy.

3. The treatment of inebriety by penal methods is disastrous to the victim, actually intensifying and making the disorder more incurable.

4. Physical treatment and isolation in special work-house hospitals, where the best conditions of physical and mental health can be applied and maintained for a long time, give the largest promise of cure and permanent restoration, and are the means suggested by nature and scientific study.

5. As a question of economy simply, it would be an immense gain to the tax-payer and society to thus quarantine these persons, and make them self-supporting. This is a fact whose practical character is well assured in many ways.

Typhoid Fever Complicated by Nephritis.

An interesting case from a diagnostic standpoint is that which Mr. Milnes reports in the *Brit. Med. Jour.*, February 16, 1884:

A nurse, who had been nursing cases of typhoid fever, was admitted into Addenbrooke's Hospital, suffering from high fever and pain across the loins; her urine was scanty, thick, and bloody, highly albuminous, and contained casts. There was no drowsy. She said she thought she had caught cold during a catamenial period a week before, and ever since had suffered from languor, feverishness, and pain across the loins. Five days

after admission, a copious eruption of typhoid spots appeared, and for several days there was moderate diarrhoea. The fever ran a rather short course, and the albumen gradually disappeared from the urine.

Artificial Food for Children.

There has been great discussion as to the qualifications of condensed milk as a substitute for the human article. Some men strongly advocate its use, while others bitterly condemn it. After reporting a case of infantile scurvy, in a foreign exchange, Dr. Edmund Owen says :

"The opinion which I have been compelled to form in my work in the out-patient rooms of the Children's Hospital, is that the worst nourished of the hand-fed infants are those that have been reared upon condensed milk and the various patent food stuffs; and that whenever an infant cannot have human breast-milk, the best substitute will be found in fresh cow's milk prepared and administered *secundum artem*."

The Absorptive Power of the Skin.

Since drugs are frequently used by inunction, it will be interesting to read that from experiments made with salicylic acid, salicylate of sodium, and tincture of iodine, applied to the skin as simple solutions or in the form of spray and with mercurial ointment, Dr. Ritten (*Deutsch. Archiv. für Klin. Med.*, p. 143, vol. xxxiv.) comes to the conclusion that the normal skin has not the power of absorbing these substances either in a fluid condition or in the form of ointment or of spray, but that all substances which irritate the skin may produce, when sufficiently vigorously applied, a solution of continuity, and may then be absorbed from the altered skin.

The Value of Internal Œsophagotomy.

Stricture of the Œsophagus has hitherto been usually ranked among that class of ailments for which little could be done. Dr. Henry B. Sands has an article on the subject in the *N. Y. Med. Jour.*, February 23, 1884, which thus concludes :

On reviewing the whole subject, we may conclude that certain forms of Œsophageal stricture, which have heretofore proved unmanageable, are no longer beyond the reach of surgical art; and that in some of these, the internal Œsophagotomy is capable, not only of saving life, but also of re-establishing the function of deglutition, so essential to its enjoyment.

Relapsing Fever Complicated with Small-pox.

In the *Ejened Klin. Gazeta*, 1883, May 15, Dr. B. P. Brajnikoff publishes a case in which a patient, aged eighteen, admitted for relapsing fever, during the fourth relapse of the latter developed all the signs of small-pox. Microscopical examination of the blood after the appearance of variculous rash showed the presence of Obermeier's spirilla. The small-pox took its usual course. The patient recovered.

SPECIAL REPORT.

PROGRESS OF OTOLOGY.

BY LAURENCE TURNBULL, M. D.

Fatal Suppuration of the Middle Ear, and Hemorrhages from the Ear.

Hassler (*A. f. O.*, vol. xviii.) has collected twenty-one cases of injuries of the carotid artery in its passage through the carotid canal of the temporal bone. Thirteen of these cases were of suppuration of the middle ear, terminating fatally from erosion of its walls; and of the other eight cases there was serious, and in some of them fatal hemorrhage, one of which occurred in his own practice. At the post-mortem examination in his case, a portion of the carotid canal adjoining the tympanic cavity, was carious and defective. The destruction was associated with spreading caries of the temporal bone, and the osseous gap in the carotid canal was still occluded with sequestræ. (A similar condition existed in a case which I presented at a meeting of the Philadelphia County Medical Society.) The aperture in the softened arterial wall was found at the spot where the course of the vessel passed from the vertical to the horizontal direction.

Boke (*Archiv für Ohrenheilkunde*, vol. xx., p. 47) has reported two additional cases, in which there was fatal hemorrhage—in one from the bulbus venæ jugularis; in the other, from the sinus petrosus inferior.

Cases of serious hemorrhages from the large vessels in the vicinity of the tympanum, which terminated fatally, are fortunately rare, and are generally the result of long-continued and improperly-treated otorrhœas. They are found in scrofulous and tubercular individuals.

I have seen and treated a number of cases of serious hemorrhages from the ear following severe blows or falls upon the external ear and face. In one recent case the hemorrhage was caused by a fall upon the chin, in which profuse bleeding took place from both ears without apparent per-

foration of the membrana tympani. My usual course of treatment has been injections of ice water and powdered persulphate of iron, hypodermic injection of ergotine, or the mixture of acid tannic with gallic acid of "Mackenzie" given internally. When these means fail, digital compression of the carotid is maintained, or, as a dernier resort, ligature of the carotid.

The following is an interesting and instructive case of another form of hemorrhage from the ears: I was called to see Mrs. Hannah N., aged thirty-three years, on April 14, 1883, and found her to be a delicate woman, who had suffered from disturbance of the heart and kidneys when a girl, but who had since never entirely recovered therefrom. After marriage, she had conceived and borne three children, only one, however, living. The fœtus in the present instance had been dead for some time, and considerable force had been employed in the delivery, with great pressure upon the abdomen, and exposure. She recovered to a degree from the miscarriage, but suffered from sick stomach, pain in the region of the liver, difficulty of breathing, and, not regaining strength, was anemic and feeble. Early in March, 1883, she had an acute attack of "gathering in her head of both ears" (otitis media purulenta), which was followed by a discharge of blood—at times quite profuse, and then again a continuous oozing, which had kept up since the eighth of that month. The blood was most of the time of a bright color, but at intervals mixed with pus.

The previously attending physicians had plugged the ears, and the following was the condition when I visited the patient: Blood was escaping through the dilated eustachian tubes into the naso-pharynx, which was accompanied by fainting attacks. She had at three different times fainting, with convulsive attacks. However, not to anticipate, when I examined her, the pulse was very feeble, respiration rapid and irregular, face yellowish, abdomen sunken, and no tumor present except some enlargement of the liver. Her mouth was full of clotted blood, part of which she removed by her fingers or had it wiped out, but the majority must have been swallowed and afterwards vomited in the form of partly-digested blood mixed with bile. The diagnosis as received from two physicians not of our faith was *malignant disease of the stomach*.

The following is a report of the autopsy upon the body of Mrs. N., performed by my assistant, Dr. L. W. Steinbach: The body presents a somewhat emaciated appearance, subcutaneous adipose tissue being rather scanty, but the muscular

structure not extensively wasted. The abdominal parietes present a greenish, livid discoloration. There exist pleuritic adhesions of the left lung's apex anteriorly, and the lower lobe postero-laterally, but none of the right lung. The structure of both lungs is normal, with the exception of a very limited tubercular deposit in the right apex. The heart occupies a normal position, is considerably and uniformly hypertrophied, its auricles empty, and each ventricle containing a large clot of apparently freshly-formed fibrin.

The omentum had a yellowish-green color. The intestines were moderately filled with gas and greenish-yellow liquid feces. The stomach was moderately distended, and its walls thin, discolored, and not congested. It contained about a pint of reddish-brown liquid, of the consistency of thick cream—apparently partly-digested blood mixed with gastric juice. The liver is slightly enlarged and greatly discolored on its posterior surface by bile pigment; its structure being apparently normal. The gall bladder was large and full. The spleen had twice its normal size and weight. The right kidney, larger than usual, presented otherwise a healthy appearance. The left kidney being atrophied, with its cortical and medullary substance disappeared, only the collapsed (not contracted) investing capsule, the pelvis, and other fibrous structures, remaining.

Her bladder was normal, but the uterus bore at its os the cicatricial marks of former ulceration. The ovaries were markedly enlarged, having the dimensions of a laage-sized peach-stone. The left fallopian tube remained impervious, but in other respects the uterus and its appendages presented nothing abnormal.

The brain was not examined. The temporal bone on the right side being forcibly removed for examination, caused a breaking or tearing off of the carotid artery from the carotid canal, and the condition of this vessel could not therefore be ascertained. The middle ear and the external auditory canal contained some dried blood. The upper two-thirds of the tympanic membrane were destroyed, leaving a crescent-shaped segment below intact. A portion of the handle of the malleus was wanting, though not broken off (by manipulation), though otherwise the ossicula were intact. There was no sign of caries or necrosis of any part of the temporal bone. We would therefore class this case as one of a true otitis media hemorrhagica, and the blood may have come from one of the sinuses.

—In Vienna, in 1882, there were 16,605 births in wedlock, and 12,657 illegitimate.

CORRESPONDENCE.

Salicylic Acid in Cerebro-Spinal Meningitis.

EDS. MED. AND SURG. REPORTER:—

I see in your issue of the *REPORTER* of March 8, 1884, page 313, an article with the above caption, taken from the *St. Louis Courier of Medicine* for February, 1884, in which my name is referred to by Dr. D. C. Ramsey, as "verifying his good success with salicylic acid in the treatment of cerebro-spinal meningitis." The facts are as follows:

I took Dr. Ramsey in as a one-fourth partner, in the autumn of 1880, for one year—he being then in his twenty-second year of age, and having had six months' practice, while I had been established here as a practitioner for over twenty years. During the winter of 1880-81, we had cerebro-spinal meningitis in an epidemic form.

Toward the very latter end of the epidemic, being struck with the frequent and sudden metastasis (or apparent metastasis) from the head and neck, to one or more of the larger joints, thinking the investing membranes of the brain and spinal cord were of much the same character as the ligaments and coverings of the joints, that the pain in cerebro-spinal meningitis was of the same acute degree as in inflammatory rheumatism, that as the intense pain subsided the effusion came on as in joints affected by rheumatism, I could not resist the thought that there must be, to say the least of it, a great similarity in the two diseases; and consequently if salicylic acid was anything approaching a specific in acute rheumatism, it should do good in cerebro-spinal meningitis. These reflections I communicated to Dr. Ramsey and Dr. E. V. Spencer, of this place, at the time, also to Dr. Wm. M. Holton and Dr. McDonnald, of New Harmony, Ind., saying that my convictions were so deeply rooted, that if another opportunity offered I should certainly make the trial.

At that time I did not think, by Dr. Ramsey's actions and Dr. Spencer's words, that either of them were of my way of thinking, and was very much surprised when Dr. Ramsey, last fall, read a paper "On the Use of Salicylic Acid in Cerebro-Spinal Meningitis," (since no other epidemic of the disease has occurred in his practice), before our little county medical society.

Since I first thought of trying salicylic acid in this disease, I have had but a single opportunity, and of course that was sporadic. This case was a German boy, fourteen years old. After an efficient cathartic, I gave him salicylic acid in solution with carbonate of ammonia and bicarbonate of soda, in fifteen-grain doses every three hours. Several doses having been given without, as far as I could see, benefiting him, I increased the dose to thirty grains every three hours. This seemed to have the desired effect, so I ordered the dose back to fifteen grains, extending the time to six hours. During the following day the symptoms became aggravated, when I again returned to the half-drachm doses. After three or four doses of that amount, he seemed much improved, and was returned to fifteen-grain doses every six hours.

From this time on he made a steady and rapid recovery on the fifteen-grain doses every six hours. One case, and that not during an epidemic, simply does not prove anything. Now, I am not alto-

gether in favor of one person "stealing another's thunder," and I am utterly opposed to stealing a man's thunder when he really has none to steal.

I consider the remedy entirely untried. What its effects may be during an epidemic, I deem perfectly problematical, trusting a sufficient number of the profession may think it worthy of investigation.

Too many, frequently those who have only been engaged in practice a short time, have to air themselves by appearing in print; and frequently by seeming worth, cause us to have to clear away such an immense amount of rubbish to get so little of worth or fact.

What we want are *candid* writers, with *practical* articles, based on a *thorough* experience, and not simply to have their names sounded abroad in the land; there certainly should be a higher ambition than that.

JOHN B. WEIVER, M. D.

Mt. Vernon, Ind.

Blood-letting vs. Morphia in Puerperal Convulsions.

EDS. MED. AND SURG. REPORTER:—

The following case of puerperal convulsions may be of interest to the profession from the two remedial agents applied:

On the 21st of February, at 6 p. m., I was called to see Mrs. L., aged twenty-five, primipara, pregnant at full term; found patient vomiting; complained of pains incident to labor. Upon examination, found os undilated and rigid; pulse 100. Within a few moments, she was seized with a severe convulsion. As soon as practicable, gave R. potass. bromid., gr. x.; chloral hydrate, gr. x., which was immediately thrown up. Sent for Dr. Henry; then gave, hypodermically, R. morphia sulph., gr. $\frac{1}{2}$. In one hour she had another convulsion, followed by same treatment, and continued to have them at same intervals, followed with same treatment, until the fourth convulsion occurred. At this period, there was no change of circulation (100), no progress in labor apparent, pupils contracted, skin moist, with profound sleep, which continued twenty-four hours from time of first convulsion. Then she aroused at short intervals, complaining of pain in back and uterus. Upon examination, found her in first stage of labor, which progressed nicely without anesthetics or opiates. At 9 p. m. a still-born boy, of medium size, was born. Gave R. fl. ex. ergot in latter end of second stage; uterus contracted, with little hemorrhage—probably too little, as the sequel may show. Applied bandage, and within one hour, having other patients requiring my attention, I left her with Dr. H.

Patient rested quietly for five hours after delivery, when she was seized with a violent convulsion. I was summoned at once to return. Arrived in two hours after paroxysm; found doctor (not being equipped with a hypodermic instrument) had taken thirty ounces of blood from her arm. Circulation 100. Patient remained quiet by the aid of a few inhalations of chloroform upon any indication of emotion throughout the following day. Patient made a good recovery.

Now, the question may arise, should blood-letting have been the proper treatment after the first convulsion? If we had had the assurance

of controlling the third stage of labor properly, blood-letting appears to have been indicated, and might have prevented a recurrence of them. The convulsions evidently were of a nervous character. Orient, Iowa. H. V. MONNETT, M. D.

Salicylic Acid in Cerebro-Spinal Meningitis.

EDS. MED. AND SURG. REPORTER:—

GENTLEMEN: In your journal of March 8th, I notice a comment on the use of salicylic acid in treatment of cerebro-spinal meningitis, by Dr. D. C. Ramsey, which prompts me to give my short experience with the remedy in that dread disease.

February 20, 1883.—I was called to see a very acute and severe attack of cerebro-spinal meningitis. The patient was a German boy, ten years of age; good constitution, strong and healthy. With quinia, bromide of potassium and gelsemium, I reduced the high fever in twenty-four hours; but the intense pain and suffering still remained. Having had good success with salicylic acid in acute rheumatism, the thought occurred to me: Why will it not be good in this case? Having never heard or read of salicylic acid being used in cerebro-spinal meningitis, I was a little careful in beginning the use of it. But thinking my patient would surely die any way, I determined to try it; and with from ten to twenty grain doses every six hours, I controlled the pains and gave my patient comparative ease. The rigidity of the muscles of the neck and back became less marked, and at times completely relaxed.

Fearing serious results from too prolonged administration in the young subject, I suspended the use of it, and immediately all the pain with intense suffering returned. Again I gave the salicylic acid, and my patient got quiet and slept for hours. I repeated this several times in the course of two weeks, with the same results. In the meantime, Dr. B., a very eminent physician, with an extensive experience in cerebro-spinal meningitis, was called in consultation. He marveled at the relief that the salicylic acid gave, but did not altogether approve of its administration. Nevertheless, I continued to give it at intervals, as it seemed to give more relief and do more good than anything else I could give, or rather did give.

He made a complete recovery in about twelve weeks, without any of the bad consequences that generally follow a majority of the severe cases of this disease.

The frontal headache, noises in the ears, etc., claimed by some from the use of salicylic acid, were not observed in this case, but *vice versa*. When he was screaming loud enough to be heard into the street, with pain in the head and noise in the ears, a full dose or two of salicylic acid would calm him down and give him some rest.

I will also mention that the quantity of urine voided when he was taking the salicylic acid was twice as much, or nearly so, as when he was not taking it.

Unfortunately, I took no notes in this case, consequently cannot report it as minutely as I would like to, but hope to learn and hear more of this remedy in the future.

J. CHEWNING, M. D.

Renault, Ill., March 13, 1884.

NEWS AND MISCELLANY.

Transactions of the Medical Society of Virginia, Fourteenth Session, 1883.

This Society has four hundred and forty-three members, of the fifteen hundred regular practitioners of the State. Of this number there is about an average attendance annually of one hundred.

The annual address to the public and profession was by I. Edgar Chancellor, M. D., on "Mineral Waters." This subject was also presented by M. G. Ellzey, M. D., on "The Therapeutic Value of Rawley Water," and by A. M. Fauntleroy, M. D., on "Medicinal and Therapeutic Properties of Rockbridge Alum Waters."

These several papers are interesting and exhaustive, and will contribute to direct the mind of the profession beyond our limits to the great value of the mineral waters of Virginia. For several years, the Society has in vain sought such information from committees.

Report, "Obstetrics and Diseases of Women," M. G. Ellzey, M. D., Washington, D. C. This paper strongly commends the adoption of the principles of Lister in obstetrical practice, and the observance of scrupulous purity in the lying-in chamber. The author deprecates the use of iron styptics, and Monsel's solution to relieve flooding, and prefers tannin, alum and ice. As to the relative advantages of home and hospital treatment of chronic uterine diseases, the craze after specialism is considered to have gone as far as the profession should sanction, otherwise this practice may degenerate into a bold system of advertising quackery. The author rightly maintains that unmarried females should not always be subjected to vaginal explorations in ordinary cases of dysmenorrhœa; the pessary, he pronounces to be a great-abused instrument, sometimes inducing ulceration, and even blood-poisoning. The report concludes with a warning as to the danger of the protracted use of opiates and alcoholic stimulants, resulting sometimes so disastrously to women of high social position, and inducing conditions of psychological disease and of morbid erotism.

Report on "Disease of Children," by Wm. H. Coggershall, M. D., is excellent. The suggestion of Dr. Denar, of London, as to the value of fluid extract of ergot in four to fifteen minim doses every three hours for the relief of whooping cough is endorsed. In cases of cholera infantum, ice-water injections, cold compresses to the abdomen, and internally, a cream of subnitras of bismuth, are recommended; also for *infantile convulsions*, bromide of sodium, one grain well diluted in a teaspoonful of water given every fifteen minutes; and for cancrum oris and aphthous sores, the local application of subnitras bismuth often repeated, with the usual disinfecting wash and supportive treatment.

Report on "Chemistry, Pharmacy, Materia Medica and Therapeutics," by A. M. Fauntleroy, M. D. Compressed discs for hypodermic use, as prepared by Wyeth & Bro., are commended to the trial of physicians as excellent and convenient forms to administer the salts of morphia, atropine, etc., which are rendered soluble by mixture with

sodium chloride, or sulphate. *Convallaria majalis*—lily of the valley—in the form of tincture, Dr. Fauntleroy considers a valuable cardiac stimulant and tonic, free from the cumulative syncopal action of digitalis, though inferior in diuretic properties to the latter drug. The author concludes with the practical remark that "the earnestness displayed in the search for new remedies, and the critical testing of them by physiological methods, will tend to add to the resources of the healing art."

Report on "Medical Practice," S. K. Jackson, M. D. Dr. Jackson claims that during the present century epidemics of plague, Asiatic cholera, typhus or jail fever, and scurvy, to which list might be added yellow fever, have been arrested or prevented, and human life lengthened, and our ideas of the causation and the prevention of disease have been revolutionized. This report embraces the actual treating of diseases, especially those of germ origin. Quinine is the first-mentioned germicide, and is used to antidote and neutralize the sedative power of malarial poison; second, the various forms of mercury for the destruction of organisms productive of the suppurative processes of syphilis and phthisis pulmonalis; and, also, soda-bisulphite for the arrest of pulmonary abscess, the "modus operandi" of the latter being suggestive of the law that "no organism can live in the effete products of its own life, in its own excreta."

Second, there is a brief consideration of the chemical treatment of such diseases as cholera infantum, rheumatism, gout, and calculi, and finally is noticed Koch's great discovery of the existence of a parasitic organism in the tubercle of phthisis pulmonalis—a disease causing one seventh of the deaths of the human race. This parasite belongs to the rod-shaped bacteria. This interesting paper concludes with a tribute of praise to army and naval medical officers, "whose labors have already resulted in a marked decrease in the death-rate on shipboard and on land, due to improved sanitation and methods of the treatment of disease which have been suggested by modern science and by disinfection."

Reports on "Ophthalmology," are furnished by Charles M. Shields, M. D.; "How Shall We Remove Foreign Bodies from the Ear," by Julian J. Chisholm, M. D.; "Plastic Surgery of the Face," by L. McLane Tiffany, M. D.; "Injuries of the Eye," by Joseph A. White, M. D.

In a paper by W. C. Dabney, M. D., the bacillus tuberculosis question is briefly discussed. The theory of Koch that bacilli are only found in tubercular or caseous deposits, and are the essential and specific cause of tuberculosis, the author does not, as yet, consider fully established. If they were, it might be expected that nurses and attendants in hospitals for consumptives would contract the disease by inhaling the germs, which does not occur by experiments made at Brompton, Eng. A damp atmosphere and scrofulous habit, however, present the predisposing causes; and the presence of bacilli in the lungs, or other diseased organs, contributes to hasten the advance of the morbid process. The antiseptic and germicide treatment of tuberculosis is omitted. The chairman of the Committee on Hygiene, W. F. Barr, M. D., deploras in his report that the Legislature

of Virginia has refused to enact a statute regulating the practice of medicine in the State, and that the Board of Health has virtually become a nullity.

The subject for general discussion was Diphtheria, during which a valuable paper was read by Bedford Brown, M. D., of Alexandria, entitled, "Reminiscences of personal experience in the history of Diphtheria," covering a period of thirty years' time, and commencing in 1856. The distinguished author, whose opinions on surgery and medical practice have been favorably commented on abroad, urges the importance of the maxim of the sagacious Watson, viz., "Study constantly the tendency and mode of death:" this precaution, he adds, is of vital consequence in nearly all cases of diphtheria, since the danger may occur from septicæmia, uræmia, or paralysis of the reflex system of nerves, or from paresis of the organic system of nerves, resulting in an early and rapid decline of the strength of the heart's action, and of the corporeal temperature below the normal standard. Such signs the author of this paper asserts do not occur in cases of membranous croup. In the latter affection the temperature is high, and there are no indications of septicæmia, or typhoidism, whereas in diphtheria there is a decline of temperature after forty-eight hours, and proofs of blood-poisoning causing mal-nutrition and vital depression, with membranous deposit on the mucous surface of the conjunctiva, the vagina or rectum;—the infective poison expends its action on the various ganglia of the sympathetic and vaso-motor systems of nerves of the heart, lungs, and stomach.

In the necrological column of the Transactions is a notice of the death of W. O. Hill, M. D., of Woodstock, Shenandoah county, Va., adding another sad example to that of Dr. A.'s case, of Ellentown, N. Y., of the reckless use, even by physicians, of potent anæsthetic drugs. Dr. Hill, it appears, instructed his wife to bring to his bedside an ounce vial of chloral, and to pour the crystals into her hand, telling her when the dose was sufficient. This quantity was dissolved in water and swallowed, and in one hour caused death. The remnant of chloral in the vial showed that the victim had taken 120 grains.

Among the delegates-elect to the approaching session of the American Medical Association in May, are Drs. James L. Cabell, R. S. Payne, Hunter McGuire, Landon B. Edwards, and Frederick Horner.

The New Paris School of Medicine.

In the new School of Medicine now being erected at Paris, it is intended to provide unusual library facilities. Indexes of all the works in the library, representing about 60,000 volumes, are being prepared—one an alphabetical list of authors, and the other an alphabetical list of titles. It is also proposed to keep a register of all legally-recognized practitioners of medicine throughout the world. A preliminary investigation has shown that such a list would comprise about 193,000 names, namely, 65,000 in the United States, 26,000 in France, 32,000 in Germany and Austria, 35,000 in Great Britain and colonies, 10,000 in Italy, 5,000 in Spain, etc.

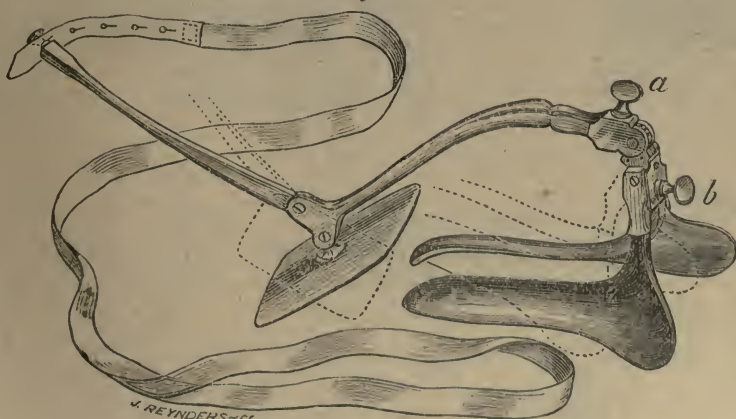
New Instruments.

As a matter of general interest, we insert a description of some new instruments manufactured by John Reynders & Co., of New York.

The illustration shows the speculum as now perfected after a long series of trials. The new speculum has an Archimedean screw at (A), by

so far short in answering its purpose as to seriously interfere with the usefulness of the instrument. At (B) there is another screw by which the width of the blades from each other is changed. The square plate at (C) rests upon the sacrum, while the looped band goes around the shoulder of the patient over her clothes; the end of this band has

Fig. 1.

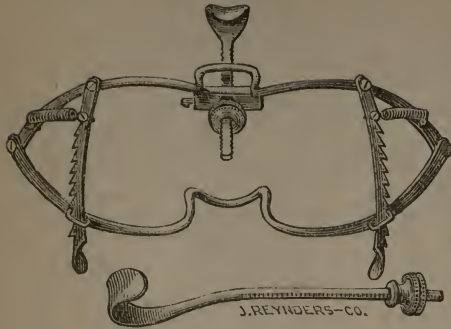


DAWSON'S MODIFICATION OF ERICH'S SPECULUM.

which the blades can be moved forward and backward very conveniently; the mechanism in the place of this in the original Erich speculum falls

button holes, by which, when the blades are introduced, the speculum can be made firmly self-retaining. This speculum, as now perfected, en-

Fig. 2.



ables the operator to dispense with the assistant or nurse who would have to hold a Sims' speculum; the vaginal walls and uterus cannot be displayed any better by any means known than by its correct application.

Figures 2 and 3 show Dr. Swinburne's Mouth Gag with Retractor, and his Polypus Forceps.

These instruments have been devised for the removal of abnormal posterior nasal and pharyngeal growths. The mouth-gag serves, of course, for holding open the mouth, and the retractor attached to it to draw forward the uvula and soft palate. Thus the walls of the posterior nasal and pharyngeal space are distended and brought in the most favorable condition for seizing the growths with the polypus forceps, particularly successfully constructed for its peculiar use. In the hands of many, these instruments have caused a most agreeable surprise by the simplicity and efficiency of the method of use they are intended for.

Fig. 4.

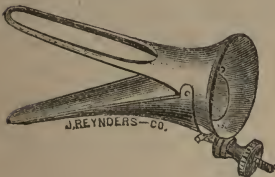
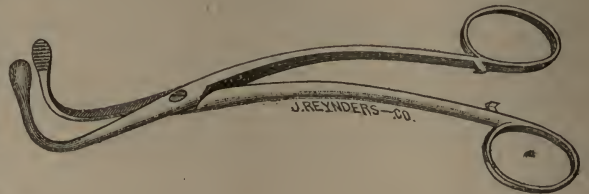


Fig. 5. A new pocket hypodermic syringe. The top illustration shows the entire instrument put together; the right end is the syringe itself, having a glass barrel and surrounded by a metal casing; to its left end a series of seven compartments are attached for holding hypodermic pellets. The instrument is so arranged that if desired but one of the compartments can be attached. It is then so compact as to be easily carried in the vest pocket.

Fig. 6. A new ear-syringe, by which a continuous injection can be made without removing the instrument from the ear. The piston-rod is surrounded by a coiled spring, by which the same in its natural position is held as though withdrawn to the rear end of the barrel. By grasping the syringe as indicated by the rings attached to it, and pushing in the piston-rod, which latter is hollow, the soft rubber tube, with its sucker, being placed in a basin with water, the syringe will become filled; releasing pressure upon the piston-rod, the coiled spring will push it back and the water pass through an opening in the piston controlled by a valve, to the other side of the lat-

Fig. 3.



ter. When the piston is again pushed in, the water in front of it will be ejected, while at the same time an additional supply will fill it to the back of it from the basin. In this manner the

Fig. 5.

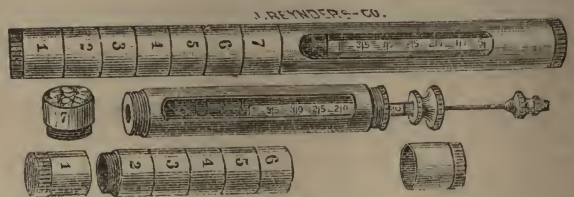


Fig. 6.

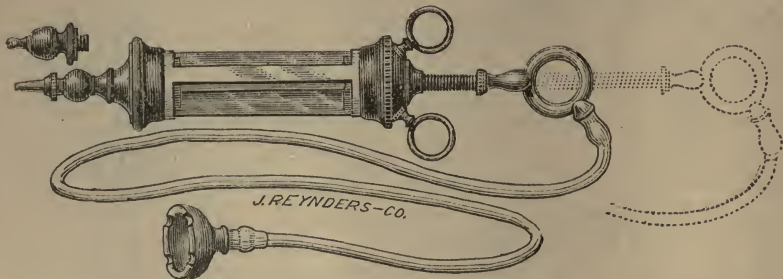


Fig. 4. A new nasal speculum by Callen, of Paris. Its advantages are obvious. operation of injecting with this syringe can be continued *ad libitum*.

South Carolina Medical College.

The annual commencement of the Medical College of the State of South Carolina was held March 1 in the presence of a large and cultured audience at the Academy of Music, in Charleston.

The degrees were conferred upon the following graduates by General B. H. Rutledge:

In Medicine.—N. Yancy Alford, Simon Beckham, William D. Bratton, R. Andral Bratton, John W. Corbett, H. L. Culbertson, J. D. S. Fairy, James E. Fales, W. N. H. Folk, B. W. Hunter, Archibald McIntyre, Joseph F. McKay, G. Augustus Neuffer, Mazyck P. Ravenel, Howard Reedy, B. Frank Smith, J. Houseal Thompson, Charles E. Wideman.

In Pharmacy.—Messrs. F. W. Schwettman, first honor; A. P. Aimar, J. A. Barbot.

The College prize, a handsome silver goblet, was then presented to Dr. M. P. Ravenel by the Hon. Wm. A. Courtenay, Mayor, who, in making the presentation, alluded to the College as being identified with the highest educational interests of the State and city, and who, in closing, said: "A reward of merit from such a source is indeed a prize, and I congratulate you upon having secured it. May it ever be to you an incentive to continuous exertion in your noble profession, and may you win its highest honors."

The annual address to the graduates was then delivered by ex-Attorney-General LeRoy F. Youmans. The address was a finished and scholarly exposition of the philosophical features of the science of medicine, and abounded in rich classical allusions and stirring rhetorical figures. It was calculated in the highest degree to impress upon the young graduates the duties and responsibilities which would attach to them in the profession they had chosen for their life-work, and was delivered with all that fervid eloquence which characterize the orator, and never fails to engage the rapt attention of his audience.

The valedictory address was then delivered by Dr. R. Andral Bratton, of Rock Hill. The address was well delivered, and included a chaste and fitting tribute to the memory of Dr. J. Marion Sims.

The exercises were closed with the benediction. During the interludes, Metz's Band added to the attractions of the entertainment by discoursing choice musical selections. There are few occasions of the kind in Charleston which are more popular than the commencements of the Medical College, and the pleasure and interest of the large audience was manifested by frequent applause and the generous offering of a wealth of floral tributes to the graduates.

Doctors on the Witness Stand.

The Hon. Will Cumback, in an address at the recent commencement exercises of the Medical College of Indiana, related this bit of personal history:

"The very last case I had in court as a lawyer some years ago was a suit against a doctor for malpractice. The witnesses were nearly all physicians, and they kindly took possession of the case. The plaintiff and defendant were soon lost sight of, and the issue was soon changed to a contest between the allopathic and eclectic systems of

medicine and surgery. The court-room became blue from the firing and explosion of the most immense technical terms from those men of science. The jury became so bewildered and dazed that they brought in a verdict of but one cent damages for my client, and failed to make any finding whatever as to the merits of the allopathies and the eclectics, so that the people of my county are still in doubt which is the best—some are for one and some for the other. I became so desperate that I accepted an office under the government, and will never return to the practice of law unless driven to it by sheer necessity."

Dr. Yandell.

Two singular and pathetic incidents are connected with the death of Dr. L. P. Yandell, the late chief editor of the *Louisville Medical News*. He sent word to the printers to reserve space on the editorial page of the issue of March 15, for some special matter that he would send to them. What he intended to publish there no one will ever know, for in the reserved space was announced his sudden and untimely death. The other incident referred to is as follows: On the day of his death he called on a physician, and, the subject of chloral being mentioned, he told his friend of a case that had come under his notice. A patient suffered much from trouble with his heart, and while suffering severely, summoned Dr. Yandell. Dr. Yandell administered a dose of chloral, which he assured his patient would relieve him. It did some good for a few moments, but then the patient fell back in his chair and died. It was, said Dr. Yandell, in speaking of the case, too sudden for the chloral to have produced the death, and the man had simply died of angina pectoris, or paralysis of the heart. In describing this case to his friend, Dr. Yandell imitated the actions of the dying man, falling back in his chair, and throwing his arms about. A few hours later, and under the same circumstances, he himself breathed his last.

Practical Chemistry in the University.

The Trustees of the University of Pennsylvania intend organizing a new department of pure and applied organic chemistry in connection with the Towne Scientific School, as soon as \$100,000 is placed in their hands for the purpose. Since the establishment of the Towne School there have been numerous applications on the part of chemical students for instruction in applied organic chemistry, together with practical work in the chemistry of those raw materials or finished products in which the applicants have been particularly interested. The University has been unable to meet the demand, since the laboratory at present is exclusively devoted to inorganic or mineral chemistry. As there is no other school of science of the same scope as the Towne School in the vicinity of Philadelphia, the trustees feel that the community has a right to look to them to supply a need if it be shown to exist. H. H. Houston has started the subscription list with a donation of \$10,000.

For the laboratory work, a building will be erected at the southeast corner of the University grounds.

Religious Mania.

The *Allgemeine Medicinische Central-Zeitung* states that a sect of persons has been discovered to exist at Rostov, in Southern Russia, who kill children by narcotic poisons, in order to keep them from earthly suffering, and secure them at once heavenly joys. The people are the victims of a religious madness.

If these people would control their own animal passions, so that these children would not be brought into the world, then the same ultimate result would be accomplished, and in a less censurable manner.

OBITUARY NOTICES.

CASPER MORRIS, M. D.

Casper Morris, M. D., a well-known physician, died March 16, in the 79th year of his age. He was born in this city, and his ancestors resided here since the founding of the colony by Penn. He graduated from the medical department of the University of Pennsylvania in 1826, was resident physician of the Pennsylvania Hospital, and practiced his profession until 1871. He was an eminent lecturer, and contributed liberally to medical works, among his publications being a valuable volume on scarlet fever.

Items.

—The centennial anniversary of the General Hospital at Vienna is to be celebrated in June next.

—The Miami Medical College held its annual commencement at Cincinnati on March 6, graduating a class of twenty-seven.

—The Detroit Medical College held its annual commencement on February 29, graduating a class of twenty-five.

—The Michigan College of Medicine, of Detroit, held its annual commencement on March 3, graduating a class of twenty-seven.

—In the *Am. Jour. Med. Sci.*, January, 1884, Dr. G. C. E. Weber reports a case of elephantiasis arabum cured by ligature of the femoral artery.

—Sponging the surface of the body with a solution of quinine in alcohol—one drachm to the pint—is now recommended for excessive sweating. It is a remedy that has long yielded us good results.

—It is reported that a new medical college has been organized in Cincinnati, under the title of the "Medical University of Ohio." This will make the fourteenth medical college in the State of Ohio.

—Another death from ether is reported in the *Brit. Med. Jour.*, the victim being a laboring man, fifty years of age, who was being operated upon at the Gloucester Infirmary for cancer of the gums and throat.

—The Medical Department of the University of Buffalo held its annual commencement on February 26. Degrees were conferred upon sixty-two graduates. The address to the graduating class was delivered by Dr. Roswell Park.

—The Medical College of South Carolina held its annual commencement on March 1, graduating twenty students in medicine, and three in pharmacy. The College has established a graded course of three years.

—The treatment of syphilis without mercury is well enough in theory, but does not work in practice. Such is the conclusion arrived at by Prof. Newman, of Vienna, as the result of a series of cases treated in both ways.

—At a meeting of the Faculty of the Medical Department of the University of Georgetown, D. C., held March 13, a committee of three was appointed to report a plan for the procurement of a suitable building for college purposes.

—A bill entitled an act to appropriate a sum of money to enable the Baltimore Medical College to equip and maintain a hospital, to be known as the "Maryland Infirmary and Lying-in Hospital for Indigent Women," has been introduced into the Senate of Maryland.

—The following placard hangs in a Tennessee store-window:

Peppermint Ile for
Hed ake
Bellee "
Tooth "

—During the academic year 1882-83 six hundred and seventy-two M. D. degrees were conferred in France. Not far from three-quarters of the whole number, or four hundred and sixty-five, were conferred by the Paris faculty. Montpellier comes next, with sixty-nine; then follow Bordeaux with forty-six, Lyons with forty-three, Nancy with twenty-one, and Lille with twenty.

—The soap weed, which grows abundantly in Colorado and New Mexico, is coming to the front as a superior material for the manufacture of paper. Experiments, it is reported, have demonstrated that from the fibre of the soap weed a paper equal to the finest linen may be produced; and as the weed grows in immense quantities indigenously in the localities mentioned, the supply of the material is inexhaustible.

—A correspondent at Stockport tells us: The latest medical bull perpetrated in this direction occurred last week, when a doctor was called in to see three sick children, for whom he prescribed. A few hours after, the mother came to him in great trouble, telling him that two of the children had died. "But," said Dr. —, "I gave you medicine for three. Where is the other?"

—The Surgeon-General of the Marine Hospital Service is informed that small-pox is epidemic in Louisville, and there were seven deaths from the disease in the Marine Hospital in that city during the last week of January.

—The Secretary of the Treasury has approved a recommendation of Surgeon-General Hamilton that an immediate inspection be made of the cities bordering on the Gulf of Mexico and the Caribbean Sea having commerce with the United States, in order that their actual sanitary condition may be known in advance of the yellow fever season. A medical officer of the Marine Hospital Service and a revenue marine officer will be detailed for the inspection.

THE MEDICAL AND SURGICAL REPORTER.

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PHILADELPHIA, APRIL 5, 1884.

[Vol. L.—No. 14.]

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

THE UNKNOWN FACTOR IN THE EQUATION OF THE NERVOUS SYSTEM.

BY J. M^r F. GASTON, M. D.,
Of Atlanta, Ga.

(Concluded from page 388.)

An independent order of small uniform tubes serves to connect the final ramifications of the arteries and the initial developments of the veins. Even in the original investigations of Harvey, upon the circulation of the blood, communicating channels were recognized, by which the transfer of the blood from the arteries to the veins becomes established. Yet, the discovery of a distinct arrangement of vessels, known as the capillary system, was reserved for the genius of Malpighi, who elucidated the general properties of this connecting-link in the circuit of the blood. The special physiological role of these intermediate tubercles is not, however, as yet, fully comprehended. It is evident that the blood is conveyed through this network of filiform ducts from one to the other set of vessels; but what physical law controls this transmission has not been clearly defined; nor is the element that effects the appropriation of alimentary particles, and causes the alteration in the blood, duly understood. The impulse given by the heart, propagated through the elasticity of the coats of the arteries, is sufficient to urge forward the column of blood in its course until it reaches the capillaries.

After passing through this sieve-like structure, and undergoing a process by which its nutrient

elements are incorporated into the various tissues, the current of the blood enters the small initial venous branches on the other side, and under the influence of the *vis a tergo*, and the suction of the gradually enlarging calibre of the veins, it is then conveyed along the venous trunks, until, by the active dilatation of the right ventricle, it enters the heart. This seems all very simple; but what is the nature of the dynamic action upon the blood in its passage through the intermediate conduit betwixt the arteries and the veins remains to be settled. It is the province of all tubes of small calibre to promote the entrance of fluids to a limited extent, even against the force of gravity. Beyond this capillary attraction, there is nothing in the anatomical arrangement of these tubes which determines the flow of blood. The capillaries have an action distinct from the heart; but what is the character of that capacity for independent action is not well understood; and this factor is lacking for a due comprehension of the correlation of the vital forces.

The vaso-motor system supplies the nerve element that pertains to the coats of the arteries, and it may appear that we need not look beyond this recognized distribution of the ganglionic nerves for a clue to the circulation of the blood; yet the student of physiology will fail to discover in the ramifications of this class of nerves any correspondence to what has been referred to as the dynamic property of the nerves.

While the excito-motor element of the nervous system is intermittent and even accidental in its manifestations, and the excito-secretory function is variable, being dependent upon many concomitant circumstances for its operation and results,

the vaso motor system does not sufficiently elucidate the supposed relations of the external and internal parts of the body, that are vaguely comprehended in the term sympathy.

The property of the nervous system which I would indicate as the excitodynamic element is more constant and continuous in its bearing upon the physical and vital operations of the organism. In its inherent quality of sustaining the forces of the organization, we have, as it were, the main-spring of life. Either of the other attributes of nerve-power might be arrested temporarily without impairing seriously the performance of the vital functions. Should there occur, however, any interruption of the function of the dynamic system, the machinery that is dependent upon its influence would cease to act, and death must ensue.

The due operation of this vital force, if I may use a much abused term, can be modified, but not suspended, consistently with the role of the various organs, nor can it be interrupted for any appreciable period consistently with the life of the organism.

It is evident that the plexus of nerve fibrils that enters into the network of the capillaries is so correlated with the ganglionic system of nerves as to afford a connection with the entire corporal structure, and that through this channel an influence is propagated to every part of the physical organization for good or for evil. The data here presented afford a proper basis for practical experiments as to the relations of the nerves to vital force; and I trust that the connection of the subcutaneous nerves and capillaries with the internal organs and the entire organism may soon be clearly defined.

The transmission of a telegram by the electric fluid does not more clearly prove the existence of the battery and the conducting wire, by which it passes, than the facts growing out of the developments of health and disease demonstrate a nervous connection which implies the excitodynamic function of the central system of nerves.

This inference from clinical observation requires confirmation by a series of experiments; and I await with confidence the results of experimental investigation respecting the intricate and complicated relations of the cerebro-spinal and ganglionic nerves for the presentation of facts to sustain my theory of an excitodynamic division of the nervous system, independent of the vaso-motor nerves.

Whatever doubts may be entertained as to the route traced by poisons that are brought into

contact with the minute net-work of the nerve fibrils and the capillary vessels in the areolar and cellular tissues, there can be no question as to an extraordinary and rapid transmission of an injurious impression to the other tissues, and to the different internal organs. The point to be set clear in a clinical aspect, is the reciprocal relation of cause and effect; and the clue to a rational solution must rest with experimental physiology.

The constant operation of impressions by a link of connection independent of the afferent and efferent nerves, strengthens the inference from clinical observation, in favor of a special nervous communication between the outer and inner parts of the body. If this hypothesis can be sustained by future experimental demonstration, it may be accepted as a final and satisfactory explanation of the unknown quantity in the problem of physiology and pathology, as respects the nerve element.

The same difficulties that are encountered as to the true explanation of the prompt effect of poisons, which are introduced beneath the cuticle, present themselves in the consideration of the influence of subcutaneous remedies. Should my suggestion prove to have a proper basis, it may seem to relieve all cases in either department of any embarrassment.

In deducing from facts the great principles involved in the reciprocal relations of the different parts of the organization, we have a rational explanation of the physiological and pathological development of the organism in the vital functions. If my effort to illustrate the principle I would inculcate fails to convey a distinct conception of what is to be supplied, it may at least suffice to create a strong presumption in favor of the reality of the basis upon which hypodermic and other medicated injections are preferred for the cure of diseases.

Some of these medicinal agents are introduced with a view to their remote influence, while others are used to modify the tissues into which they are injected, and hence for a purely local effect.

The aim of this paper is to impress the advantages of subcutaneous and other injections of medicinal agents over the administration of remedies by the mouth, and to inculcate especially that this depends upon the prompt introduction of the agent by the correlation of the nerve fibrils and capillaries with the central nervous system, and that the effect ensues to a large extent from a peculiar influence propagated to the organization of the various parts.

This final result of all such applications is not

a consequence of reflex action emanating from the excito-motor nerves, nor from the excito-secretory nerves, nor yet from the vaso-motor element of the nervous system. It is accomplished through a function of the nerves quite distinct from either of these recognized properties, and which underlies all other exhibitions of nerve power.

Conflicting opinions are held by those entitled to our consideration form their practical and experimental investigations, in regard to the relations of the nervous system to the dependent organs. While Brown-Sequard recognizes the medulla and spinal cord as the chief source of "the nerve influences in the tissues," Dr. W. H. Gaskell, by his investigations in the physiological laboratory at Cambridge, concludes that "many phenomena now believed to be produced by the agency of the nervous system may be really independent of it."

Until these antagonistic views of physiologists are reconciled by more conclusive experiments and observations, we must be content to grope our way, with the light of clinical experience.

As the theory proposed by Dr. H. F. Campbell in regard to the excito-secretory division of the nervous system, deduced from his clinical observations, was confirmed by the experiments of Marshall Hall, I await some similar result of experimental inquiry in support of my view of an excito-dynamic division of nerves, distinct from, and entirely independent of, the vaso-motor element of the nervous system. The local influence that effects an alteration in any part, is of little consequence, in comparison with the vital change which is operated in the tissues and organisms, by the relation of the excito-dynamic element of the central nervous system to the great sympathetic nerve and its ganglionic ramifications. The interlocking and interlacing that exists betwixt the distribution of the cerebro-spinal system and the ramifications of the organic system of nerves, afford the conditions upon which the sympathies of the excito-dynamic function of the nerves operate. This nice arrangement of the ultimate development of the minute fibres of the two sets of nerves, is found in the remote plexus associated with the distal circulation, destined to supply nourishment to every separate atom of matter that enters into the composition of the body. The interchange of powers growing out of this relation in all parts of the organization, being closely associated with the capacities of the deep-seated nerve-centres, presents a series of reciprocal actions, and the actions that constitute what are vaguely styled the sympathies of the different portions of the system, and which is

herein designated as the excito-dynamic element of the nervous system.

"RIGIDITY OF THE CERVIX UTERI AND THE USE OF ERGOT."

RY T. J. HAPPEL, M. D.,
Of Trenton, Tenn.

On page 232 of the MEDICAL AND SURGICAL REPORTER, February 28, 1884, I find an article on the above subject, apparently in the form of an inquiry as to the methods of procedure.

Labor, at best, is, to the patient undergoing its throes, a physiological process involving much suffering. It behooves medical men, therefore, to do everything that can safely be done to alleviate their pain, and to enable them to undergo with fortitude as well as safety their, to them, dreaded ordeal.

"Patience and a cheerful demeanor" on the part of the medical attendant are of prime importance in every case of labor, and especially in those characterized by rigidity of the os. One great reason why in former times lacerations of the cervix were not recognized, was that these lacerations much more rarely existed. Labor was not hurried through by the attending physician, that he might either rush to another case of labor, or that he might not lose his much-coveted sleep, or fail to make some other desired call, as is too frequently the case in these days of rush, and greed for gain.

Ergot and the forceps, two of the most powerful agents for good in obstetric practice, have inflicted upon females an unknown and an untold amount of damage. A labor lingers; a physician calls, a few questions are asked, a hurried examination is made; a dose of ergot, greater or less, as thought needed, is administered; tonic contractions of the uterus result: by the efforts of the woman the uterus and its contents are forced low down in the pelvis, the vertex is recognized as presenting, the forceps are applied, and the child forcibly delivered. The physician flatters himself that he has performed a skillful (?) operation, and goes off, after having made a slight examination of the perineum. The woman!—well, after a slow and tedious convalescence, she gets out; but, as she expresses it, "has no back." Later on, perhaps never, a lacerated cervix is recognized. I do not think I overdraw the picture. Ergot and the forceps are both abused.

To explain my own procedure, I would cite the following cases, occurring in my practice since January 1, 1884:

Case 1. January 7, 1884, was hurriedly called to visit —, colored. The messenger reported that, after some slight pains, the waters had broken; since then, that the intervals between the pains had been long and irregular. I reached the case at 3 p. m. The facts, as stated above, were repeated. The patient was a large, fleshy female of relaxed, scrofulous habit; multipara, third labor. An examination revealed the uterus high up, the os dilated about an inch, but very dilatable, thick, flabby. The pains were slight—intervals from fifteen to thirty minutes. After delaying and watching a few pains, I administered liq. ergotæ purificat., ℥ xv.; fl. ext. ipecac, ℥ ij. to ℥ v. M., every fifteen minutes, till four portions had been given. When the pains began to increase in frequency and strength, I then gave a double portion of the R. at a dose, and at 4½ p. m. the patient was safely delivered. No trouble from the placenta, which was removed in about five minutes. No hemorrhage. Before leaving I gave liq. ergot. pur. ʒj. Patient did well. Suffered but little from after-pains.

Case 2. January 17, 2 a. m., Mr. — called me to see his wife. Third labor. Waters had broken after a few pains, which had recurred irregularly from twelve o'clock. Patient was nervous, dreading the labor, on account of the, to her, irregular beginning. Soon quieted her fears, and made an examination. Os rigid, not dilated enough to admit the extremity of the index finger. Administered at once R. morphiæ sul., grs. ¼; atropiæ sul. grs. ⅛, hypodermically. In half an hour the patient was free from all pain and nervousness, and soon went to sleep. Left her and returned home, a short distance off.

Called at 9 a. m. Patient had rested well; was feeling slight pains occasionally. An examination revealed an os dilated to the size of half-a-dollar, and dilatable slightly. Repeated the hypodermic injection same as before, and left, with directions to call me when pains returned.

Was summoned at 4 p. m. Found pains regular; patient cheerful, had slept and rested well until an hour before; had not vomited. Dilatation almost complete; uterus low down; all the parts soft and dilatable. By 5 p. m., the patient was delivered of a seven-pound girl. During the expulsive pains chloroform was used. After the expulsion of the child, liq. ergotæ pur. ʒj. was given. The placenta was delivered in less than ten minutes.

Case No. 3. January 18, 3 a. m., Mr. — called me to see his wife, multipara, seventh child. He reported that at 1 a. m. his wife was aroused by the escape of "the waters." Arriving

at the house, about three miles out of town, I found the wife sitting up, cheerful, but a little nervous, over what she expected to be a tedious labor. An examination revealed a thick, rigid os. Treated as Case No. 2, and at 2 p. m. pains began to be regular. I found upon examination an os dilated about two inches, somewhat dilatable, thick. Gave

R.	Liq. ergotæ pur.,	℥ xv.
	Fl. ext. ipecac,	℥ v.
M.		

And repeated dose in 15 minutes.

In half an hour after the second dose labor ended. Chloroform was offered during the second stage of labor, but was refused. The case was completed as in the second case.

Case No. 4. January 22. Was called at 2 a. m. to see Mrs. —, multipara. The history of No. 3 was repeated. Was soon at the bedside. Pains were vigorous, os dilating steadily; no rigidity. Nothing was given until the expulsive pains began, when a small amount of chloroform was inhaled. Labor was completed at 5 a. m. Ergot was administered after the expulsion of the child, as in the other cases. The placenta was extracted in five minutes, without trouble.

Case No. 5. January 24. Visited her. Multipara, third labor. Nervous and hysterical. Claimed to have suffered for forty-eight hours. No dilatation of the os, parts rigid, and rather dry. Hypodermic injection of morph. sulph. gr. ⅓, combined with atropiæ sul. gr. ⅛, was administered. In twenty minutes she became quiet and sleepy. Returned home. Was called the next night at 9 p. m. Had vomited from the morphia. Pains regular. Os rigid, but slightly dilated, membranes protruding. A small fibroid, about the size of a small hickory-nut, on the anterior external surface of the anterior lip of the cervix. Repeated the hypodermic injection, and waited. At 12 m., the os began to relax and dilate, the posterior half of the cervix being very dilatable, the anterior being markedly interfered with by the fibroid. Pains were very inefficient, and after a little delay, began using the ergot and ipecac, as in Case 3, in the same dose, repeating every fifteen minutes. The pains soon increased in efficiency. Patient vomited frequently. Soon after the fifth dose dilatation was completed. The head passed the os without laceration, and labor was completed under chloroform at 2 a. m. The membranes did not rupture till just before the birth of the child. Before leaving, gave ergot, as in the other cases.

Case No. 6. January 27. W. B., multipara.

Labor began with the escape of the waters at midnight. Saw her at 8 a. m. Pains had been light, irregular, and inefficient. Os soft, thick, dilated an inch in diameter, very dilatable, soft parts much relaxed. Waited an hour. Only one or two very slight pains. Gave

R. Liq. ergotæ purif., $\mathfrak{m}\text{xx.}$
Fl. ext. ipecac, $\mathfrak{m}\text{iv.}$

M.

Repeated every 20 minutes.

After the third dose active labor began. At 10 a. m. dilatation was complete. Child was expelled at 11 a. m. Ergotæ $\mathfrak{z}\text{j}$ was given at once. In ten minutes the placenta came away, under friction over the uterus, and slight traction upon the cord.

Case No. 7. February 18. Visited Mrs. —, primipara, at 4 a. m. Labor began with the rupture of the membranes and escape of the waters at 1 a. m. Patient was nervous and despondent. Digital examination revealed uterus high up, os rigid, no dilatation. At once gave hypodermically R. Morphine sul., grs. $\frac{1}{4}$; atropiæ sul., grs. $\frac{1}{80}$. Quiet in twenty minutes. Left her. At 10 a. m. pains returned. Os rigid, but dilating slowly. Repeated the hypodermic injection. At 1 p. m. pains regular; os dilating—thin, soft; patient cheerful. At 3 p. m. the pains, though regular, were short, and devoid of strength. Began giving liq. ergotæ, $\mathfrak{m}\text{xv.}$, repeated every twenty minutes. After the third dose pains more active, and at $4\frac{1}{2}$ p. m. patient gave birth to an eight-pound boy. No laceration, and but little soreness. Urine was drawn with catheter once, after labor. Chloroform was used during most of the second stage, but weakened the pains. Case was completed as the others.

Case No. 8. February 21. Attended Mrs. — in her second confinement. Waters discharged with first pain at 3 a. m. Was called at 8 a. m. Patient in best of spirits; pains slight and at long intervals; os soft, thin and dilatable; external parts well relaxed. After waiting an hour, I gave ergot $\mathfrak{m}\text{xx.}$, and in twenty minutes repeated it. At 10 a. m., pains more active and regular. Then give

R. Liq. ergotæ pur., $\mathfrak{m}\text{xx.}$
Fl. ex. ipecac, $\mathfrak{m}\text{vj.}$

M.

At 11 a. m. expulsive pains began, the dilatation being complete. Before 12 m. a $7\frac{1}{2}$ -pound girl was born. Chloroform was used as in case No. 7. The placenta was removed in five minutes, the extraction being preceded by the ergot, $\mathfrak{z}\text{ss.}$

In my whole practice I have never met with as many consecutive cases, beginning as these did with the discharge of the waters.

The histories given set forth the treatment that I follow in such cases.

In all cases of rigidity of the os, with little or no dilatation, I use the hypodermic injection of morphia and atropia, proportioning to suit each case. I regard the combination as better than morphia alone. Pain is relieved by the morphia, and at the same time none, or at worst but *few*, of its unpleasant effects are experienced. Atropia counteracts many of them, stimulates the patient, keeps up the the capillary circulation, etc.

In the course of four hours, if needed, I repeat the injection; but if the os is dilating and thin and dilatable, I do not.

My experience with chloral in such conditions has not impressed me favorably. Chloral has proven with me, in safe doses, only an hypnotic, not an anæsthetic. In full and repeated doses it might have, and no doubt does have, anæsthetic properties strongly marked. I think I am sustained in these views by Ringer in his Therapeutics.

Gelsemium is unreliable.

In most primiparous cases, except such as are unusually rapid, I give morphia and atropia to prevent the wearing out of the patient during the tedious first stage of labor.

In cases where the os is partially dilated, dilatable, thin, and the pains normal and effective, I do nothing, but trust solely to nature; but in the same condition of the os, with the pains slow, irregular, and ineffective, I administer liq. ergotæ purif., or fl. ext. ergotæ $\mathfrak{m}\text{xv.}$ — $\mathfrak{m}\text{xx.}$, repeated every fifteen or twenty minutes, adding usually after the third or fourth dose, fl. ext. ipecac $\mathfrak{m}\text{v.}$ — $\mathfrak{m}\text{x.}$

In cases where the os is partially dilated, soft, dilatable, but thick, if the pains are normal, I administer a few doses at intervals of fifteen minutes of fl. ext. ipecac $\mathfrak{m}\text{v.}$ — $\mathfrak{m}\text{x.}$; but in the same state of the os, with pains slow, irregular, and accomplishing nothing, I administer liq. ergotæ pur. $\mathfrak{m}\text{xv.}$ — $\mathfrak{m}\text{xx.}$, fl. ext. ipecac $\mathfrak{m}\text{iv.}$ — $\mathfrak{m}\text{vj.}$. Repeat every fifteen or twenty minutes through the first stage of labor.

In cases where the os is thin, partially dilated, but not dilatable, with pains active, I use chloroform.

In cases similar to the last, except a thick os, I would administer hypodermically morphia and atropia, and then if necessary follow with ergot, or ergot and ipecac.

Where the membranes have not ruptured, and where no rigidity is present, I trust to nature, except in cases of primiparæ already referred to.

In a practice of more than ten years, taking the above rules as my guide, in my own practice, in about six hundred cases of child-birth, I have never had to apply the forceps, nor had a lacerated cervix or perineum, but have frequently in consultations used the forceps—in two cases recently—and have seen and operated on two cases of lacerations of the perineum, and one of the cervix; and have recently been consulted about two other lacerations of the perineum within less than three months.

One further use for ergot in obstetric cases. As soon after the expulsion of the child's head as possible, and always before removing the placenta, I give ʒj. of ergot, and unless very firm contraction of the uterus takes place, before I leave the house I repeat the dose.

I have never been troubled with excessive hemorrhage.

A CASE OF SCIRRHUS OF THE PANCREAS SIMULATING ABDOMINAL ANEURISM.

BY M. W. LILLY, M. D.,
Of Grand View, Iowa.

Mrs. J. D. Wade, aged fifty-three, rather above the medium size, and of a bilious temperament. Has been poorly for years; mostly bilious and neuralgia, with a special tendency to stomach and uterine troubles.

History.—In the evening of September 1, 1883, I was called to see her. She was sitting up, and gave me about this history: More or less of the time since February last, has been troubled with a burning pain a little to the left of the pit of the stomach. Sometimes it is a throbbing, and then again a shooting pain, upward into the heart and gullet, into the back, and occasionally downward. Sometimes the burning seemed more in the œsophagus than in the stomach, but not often. Food, even in small quantities, distressed the stomach, and made the pain worse immediately after being taken, but otherwise the functions of the stomach were not much impaired. But seldom troubled with flatus or costiveness. Kidneys and bladder gave her some trouble, also a cough; but these, she said, were not worse than they had been for the last fifteen years at times. Another physician had had the care of her for the last six or eight weeks. I found her decidedly salivated from medicine taken that morning, some of which remained, together with some large doses of salicylate of soda and some drops containing belladonna and gelseminum. I discontinued these, and applied myself to the pyalism and the purging and vomiting which still continued.

On the 2d doing fairly well.

On the 3d I examined the stomach more carefully—had been too irritable before—and found it not very tender except on deep pressure. At this visit I first discovered a small pulsating tumor, which I judged to be behind the lower edge of the stomach and transverse colon, and an inch to the left of the median line. In size it was about as large as one's finger, by 2 or 2½ inches long, lying vertically, and rather tender. On the palmar surface of each hand, opposite the carpo-metacarpal joint of the fourth finger, was a small purplish spot, about 5 by 8 lines in extent. They were under the skin, and disappeared under pressure. The pain in or under the stomach being worse of evenings, I gave quinine and applied a blister.

I saw her on alternate days till the 10th, during which time I blistered twice, and gave sulph. hydrastis, willow charcoal, and chlor. potash, on which she improved. Spots on the hands spread a little.

Did not visit her again until the 20th, and again on the 27th. Found but little change.

October 2. A good deal of pain in the uterus, particularly if on her feet at all. Made an examination per speculum, finding a small abrasion only on the posterior lip, though considerable cervical endometritis and leucorrhœa.

October 10. About the same.

October 18. Saw her with Dr. J. H. Graham, of Morning Sun. Found her about the same as on my last two visits. We used local treatment for the uterus, and continued small and frequent blisters over the stomach, with the wil. charcoal and chlor. potas. internally.

November 19. Saw her again, with Dr. Graham, to-day. For the last month I had found her gradually growing worse. The tumor was perceptibly larger; also, the spots on the hands, which now cover nearly all of the palms but the centres, and the face and edges of most of the fingers from the nail to the first joint. They are mostly of a deep scarlet color, in which are smaller purplish spots, somewhat raised, exceedingly tender, and having a constant burning pain which nothing relieves. Some days both these colors are more marked, and the spots more tender, at which times the pain and distress about the stomach are usually better. Also, at this period she had three or four slight attacks of conjunctivitis. The burning, throbbing pain in the stomach and tumor is becoming more constantly severe, and the strength and flesh failing. Food distresses the stomach very much, it being with the utmost care that she can

take any nourishment. Can sit up but little now, and lies with limbs flexed to relieve the tension of the abdominal muscles.

As to treatment during this time and for the three following weeks, we tried many things, among which were nitrate of silver, dil. phosph., and sulph. acids, aqua calcis, creasote, bromid. potass., deod. tr. opium, and fl. ex. Jamaica dogwood. The last two the stomach would not retain, and the others did no good, or but for a short time only. Blisters were frequently repeated, but they have lost their efficacy, and vesicate but poorly. The charcoal and chlor. potass. would usually give the most relief of anything used. We urged the hypodermic injection of morphia, but she would not consent to it till December 7th, when she became much worse, and the pain unbearable.

(*To be Continued.*)

ATONY OF THE BLADDER.

BY J. B. JOHNSON, M. D.,

Of Washington, D. C.

I was called on the 15th of November to visit Mr. S., at Harper's Ferry, West Virginia. I found him to be a man of seventy-two years, with a good constitution, temperate habits, and moral character. His appetite was good, tongue clean, and bowels regular. He said he suffered no pain, but felt himself growing gradually weaker, and that he had lost all power to pass his water; that day and night it was dribbling from him, unfitting him for business, causing great inconvenience, keeping him constantly wet, and always with a cold; and that he had been in this condition for two years, but for the last six months his difficulty had steadily increased. On exposing the abdomen, I saw the urine coming away, drop by drop; and placing my hand over the bladder, found it hard and distended, occupying the whole hypogastric region. He had never been catheterized, and possessed great dread of the instrument; but on being assured that its use was of the utmost importance to an intelligent understanding of his case, he readily gave his consent to its use; and selecting a well-curved No. 11 gum catheter, I passed it, well oiled and warmed, without the slightest obstruction, into the bladder, and as soon as the point of the catheter entered the bladder, the pent-up urine began to flow freely through it, and continued to flow until *four pints and a half* passed off. I then stopped the flow of the urine by withdrawing the catheter, and administered immediately by the mouth sixty drops of tincture of opium to keep off nervous excitement, and

requested him to go to bed and be quiet. He suffered not the slightest faintness during the emptying of his bladder: and four hours after the first use of the catheter, I requested him to introduce for himself the instrument into the bladder, which he did without pain or trouble, and again one pint and a half of urine passed off. I then repeated the sixty-drop dose of tincture of opium, and left him in charge of Dr. Spangler, of Harper's Ferry.

This was a well-marked case of atony of the bladder, unattended by previous disease of either the brain or spinal cord, and attended by very slight enlargement of the prostate gland. It was a loss of the contractile power of the muscular coat of the bladder, and caused by a slight enlargement of the prostate gland, attended with the habit, on the part of the patient, of retaining his urine too long in the bladder. It painlessly came on gradually, and its increasing presence was more and more manifested by an increase of the escape of urine drop by drop, accompanied by frequent and unsuccessful efforts to urinate. The catheter, rest, tonic medicines, and nourishing diet, are the only means we possess of palliating such distressing troubles of advanced life.

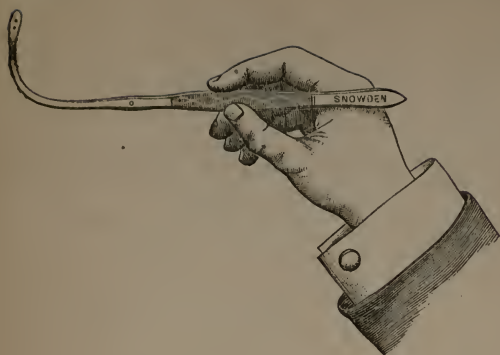
MODIFICATION OF COHEN'S LARYNGEAL FORCEPS, MAKING THEM ADAPTABLE FOR POST-NASAL, PHARYNGEAL, AND LARYNGEAL APPLICATIONS.

BY CHARLES E. SAJOUS, M. D.,

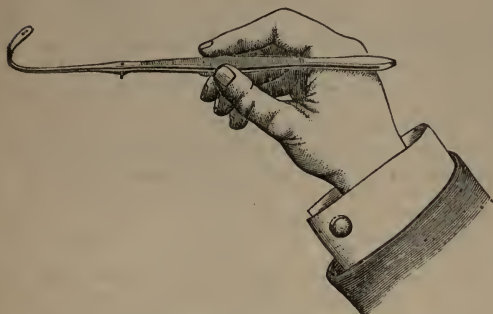
Instructor on Laryngology and Rhinology in the Summer and Post-Graduate Courses, Jefferson Medical College, etc.

The spring, slide and catch, and general conformation of Dr. Cohen's valuable instrument having been preserved, the only modification, as shown in the cuts below, is in the shape of the curve, which, instead of a right-angle, assumes that of the arc of a circle, with retrocession of the tip towards the centre.

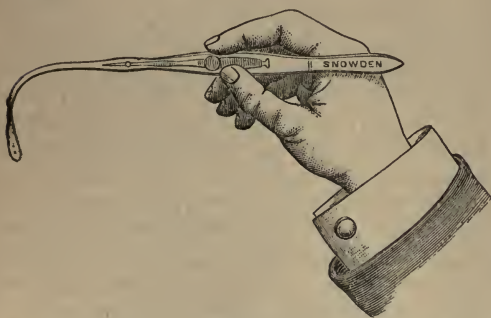
In the posterior nares, this peculiar curve renders it available for applications to the turbinate mucous membrane, mouth of the eustachian tubes, pharyngeal vault, etc., the position of the tip being regulated by that of the handle. In simple curves, that is to say those in which the axis of the tip is at right-angles with that of the handle, the tip does not reach the inferior turbinated bones, or the floor of the posterior nares, the depression of the lower jaw not permitting sufficient depression of the handle.



For the pharynx, it takes the place of the straight forceps when held horizontally, directing the tip toward the pharyngeal wall, and enables the operator to medicate in one application the whole tract from the vault to the beginning of the œsophagus.



For the larynx, the curve following a line passing over the tongue and the posterior surface of the epiglottis to the middle of the vocal bands, it preserves the advantages of right-angle instruments, without involving their difficult manipulation.



The instrument is smaller and lighter than Dr. Cohen's.

—Iodoform is being adulterated with picric acid, according to Jules Libert, a pharmacist of Liège, Belgium.

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED IN THE HOTEL DIEU, PARIS, FRANCE.

BY DR. F. RAYMOND.

Fellow of the Society of Medicine, Physician to the Hospice des Incurables.

1. Acute Meningitis in the Course of Typhoid Fever. 2. Tubercular Meningitis in an Adult.

(Continued from page 394.)

This case is worthy of a place among several others which have been published. The meningeal complications, and those pertaining to the nervous system generally, in the course of general diseases, of grave pneumonias (the pneumonias, for example, which occur in alcoholic patients), in erysipelas, etc., are to-day well-known. You ought, in this connection, to consult the excellent thesis of M. Landouzy, in that part which concerns principally paralysis complicating acute diseases. Many pathogenetic theories have been put forth to explain such complications. Without stopping to discuss these pathogenetic theories, I desire to remark that typhoid fever is in reality a disease *totius substantiæ*; it affects all the anatomical elements, and hence the encephalon as well as the other organs. What is there then that is strange in the fact of a cerebral complication arising in a person predisposed? Has it not been remarked that the secondary meningitis of pneumonia is seen principally in drunkards predisposed by their habits to cerebral affections? Is it probable that our patient was rendered liable to this cerebral malady by his occupation? I simply put the question. It is by no means improbable that some would be disposed to blame the salicylate of magnesia for the cerebral manifestations from which the patient died. Salicylate of soda has been accused of producing meningitis when given in large doses for acute articular rheumatism, especially in the case of alcoholic patients; those particularly who were suffering from renal lesions. When given for typhoid fever the same remedy has been accused of determining cerebral complications.

In support of this view, we have been reminded of the nausea and vomiting which sometimes attend the administration of this agent. It has also been said that in some cases the cephalalgia has been greatly aggravated. I have no personal experience in this matter, as far as typhoid fever is concerned, nor have I ever seen accidents of this kind in rheumatic patients treated with the salicylate. It is true that I took care beforehand to assure myself that my patients were not alcoholic, and that there was no kidney trouble. In the case under consideration, ought we to incriminate the large doses of salicylate of magnesia employed? I do not think so, because the patient at no period of the administration of the medicament had either nausea, or vomiting, or excess of pyrexia; in a word, there was no symptom of poisoning. All these points, however, deserve to be brought up and discussed.

2. I shall be more brief in my account of the second case. You see before you, gentlemen, portions of the diseased organs of the patient, the results of the autopsy. I shall attend only to

the essential particulars of the clinical history, facts of this kind being relatively numerous. The patient concerning whom I am to speak is a female aged 45, who entered the hospital August 16, ward St. Jeanne, No. 21.

August 17, when I made my morning visit, I found her in a state of stupor, almost insensible to everything happening around her; she was with difficulty made to reply in monosyllables to questions asked her. She complained of violent headache, the pain being all over the head, also of utter prostration. The head was inclined towards the right shoulder, the face looking upward and to the left; and on trying to straighten it, we met with great resistance, due to contraction of the muscles of the back of the neck. The patient could not bend the head, and if force were used to bend it, she uttered outcries and complained of violent pains in the occiput and back of the neck. There was a slight degree of contraction in the right arm; the left arm and the left lower extremity were unaffected. General hyperæsthesia. Pinching or compression of the arms or legs, elicited severe pain. The right upper eyelid was closed, as if by paralysis of its elevator muscle. There was contraction of both pupils. The skin was hot and dry, temperature 101.5°F. , pulse small and irregular, every ten or twelve pulsations being followed by precipitation of the beats, which then became slower. Heart's action feeble; marked arrhythmia. Radial arteries atheromatous. The tongue was covered with a dirty white fur, appetite nil. No vomiting at the time of examination. Retraction of the abdomen (*en bateau*); obstinate constipation. Respiration was painful, irregular, 40 a minute, sometimes slow and sometimes quick. Dullness in the suprapinnous fossæ, especially on the right side. The same dullness under the right clavicle, with prolonged expiration of a blowing character. Expectoration scanty and purulent. Urine high colored, scanty, albuminous. The patient had subsisted by shelling peas at the central market; her diet had been poor and inadequate; she had been addicted to alcoholic excesses. For four years past had suffered during the winter from colds and coughs all the time; never had hæmoptysis. Nothing worthy of note on the part of ancestry. Eight days ago, on returning from her work, she had a slight chill; this was repeated in five or six hours, with general malaise, prostration, vertigo. Appetite failed; nausea, vomiting and constipation supervened. She was restless nights and had nightmare. Profuse perspiration.

The diagnosis of this case presented some difficulty by reason of the age of the patient and the suddenness of the attack. Was this woman tuberculous? On taking into consideration the signs furnished by auscultation, by percussion, by the expectoration, the emaciation, the fever, the antecedent attacks of bronchitis, it seemed like a chronic case of phthisis, which had not yet made much advance, for the stethoscopic signs were not well marked. In the second place, one might ask if we had not before us a case of typhoid fever or of simple *embarras gastrique* in a tuberculous patient? The state of profound prostration, the contractures, the partial paralysis, pleaded against this supposition, which was abandoned. The woman was a victim of intemperance.

Was there here chronic meningitis with recent acute exacerbation, and, perhaps, pachymeningitis? Many of you thought so, but there was nothing in the history of the case to make this diagnosis very probable. The other hypotheses suggested, acute simple meningitis, cerebro-spinal meningitis, cerebral tumors, tubercles of the cerebrum, did not sufficiently explain the assemblage of symptoms, and were abandoned.

How then were we to interpret the cerebral symptoms in this case?

The diagnosis of tuberculous meningitis, secondary to incipient phthisis, seemed sufficiently to explain all the phenomena observed. On taking into consideration the headache, the initial vomiting, the heat of the head, the contractures, the fever, I judged it to belong to the *inflammatory* form of tuberculous meningitis, which is contrasted with the *torpid* form when the symptoms are slower in their evolution. The march of the affection justified this view. The day of admission I ordered ice to the head, and prescribed a calmative draught containing codeia.

August 18. Somnolence more profound. Morning temperature 102.5°F. , evening temperature 102°F.

August 19. Sleep very much agitated during the night. This morning, profound stupor, speech embarrassed and difficult. Morning temperature 101.3°F. , evening temperature 101.4°F.

August 20. Through the night the patient was delirious, requiring the strait-jacket. The contracture of the muscles of the back and neck has increased. The patient is quite demented. Complete drooping of the right upper eyelid. Morning temperature 100.8°F. , evening temperature 101°F.

August 21. Same general condition. Some strabismus affecting the external rectus of the right eye. Right pupil very much dilated. Morning temperature 100.5°F. , evening temperature 100.8°F.

August 22. Respiration difficult, irregular, 46 per minute; pulse small, feeble, irregular, 102 per minute. The patient is plunged into a sort of cataleptic state. If you raise the left arm, it remains elevated ten or more seconds. You can put it in any position, and it continues there for some time.

Death took place on the 23d at 9 a. m. Autopsy made the 25th, in the morning.

Thoracic Cavity.—Dry pleurisy at the summit of the chest. The adhesions were much more pronounced at the right than at the left apex. A number of tubercle granulations in the former situation. There were also a small number of calcified granules in the pulmonary tissue, otherwise healthy. Heart normal, aorta somewhat atheromatous.

Abdominal Cavity.—The liver has the normal appearance. The kidneys are congested; their capsule peels off easily; a few tubercle granulations in the renal parenchyma, near the surface. The spleen and the organs of generation present nothing worthy of note. The mucous membrane of the stomach is mamillated and congested, and presented several ulcers, each the size of a small pea.

Nervous System Encephalon.—In the meshes of the pia mater exists a glutinous exudation, sur-

rounding the circle of Willis and optic chiasm. This exudation, embedding the basal nerves of the right side, extends along the fissure of Sylvius. In the midst of this exudation, fine tubercle granulations are visible to the naked eye. These are especially abundant along the sylvian artery, and in its parietal branches. In separating the convolutions which bound the fissure of Sylvius, a crop of fine tubercle granules is seen in the web of pia mater, covering the island of Reil. This is intimately attached to the underlying tissue of the brain, and is removed with difficulty. No spots of hemorrhage or softening apparent to the naked eye. The tuberculous exudation of the left hemisphere is especially abundant in the region of the ascending frontal convolution near its middle portion. The pons, rachidian bulb, the cerebellum, have their normal appearance. Along the spinal cord, principally on its posterior aspect in the dorsal and lumbar regions, tuberculous exudations of the pia mater are sufficiently abundant, and very adherent to the surface of the cord.

This observation seems to me interesting in more than one respect: 1. As M. Lionville has well pointed out, tuberculous meningitis, in clinical practice, is generally both spinal and cerebral. 2. The distribution of lesions at the base of the brain, their predominance on the left side, well explains the symptoms observed during life; the paralysis of the right levator palpebræ, the contraction of the right arm. 3. It is quite remarkable, despite the contracture of the muscles of the back of the neck, to see that the meningitis had not invaded the cervical region of the cord. 4. The age of the patient is a fact quite exceptional, and which ought to be noted. 5. The slight extent of the pulmonary lesions, which moreover were old, in contrast with the acute recent extensive tuberculous invasion of the encephalon, the spinal cord, and the kidneys, the other organs being healthy, constitutes also an important clinical peculiarity. 6. The etiological antecedents of the disease, our patient having been insufficiently nourished, and addicted to alcoholic excesses, ought also to be noted.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

BY WILLIAM PEPPER, M. D., LL. D.,

Provost of and Professor of Clinical Medicine in the
University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

Obstruction of the Small Intestine—Exophthalmic Goitre.

GENTLEMEN: I shall first ask your attention to this young man, who gives the following history: J. W., age twenty-one, an iron founder. It is stated that, even from infancy, the bowels were obstinately constipated. At the age of two months the bowels were never opened unless a laxative were given, and it required double doses of the ordinary remedies to secure a passage. This continued until he was seventeen months old, when he had an attack of looseness of the bowels, accompanied with the discharge of mucus and blood. At the age of two years, the bowels became more

than usually constipated, and this was followed by stercoraceous vomiting. Vomiting of this character continued for seven months, the spells of vomiting recurring on an average about once a month. All this time, the belly was swollen, and he complained of intense colicky pain. After this, the bowels became less constipated; laxatives would act, and the vomiting disappeared. The belly, however, remained large. Gradually the pain disappeared, and for years the bowels were moved once every day, with hard, constipated stools. The belly has occasionally gone down to its natural size, but it never remains small for longer than three months at a time. Notwithstanding this condition, he grew, kept his strength, and was able to go to work in an iron foundry. His appetite is pretty good, and he has always been careful in what he eats, and chews his food well. He has a great deal of wind, which passes freely. The great distension of the abdomen has caused some shortness of breath.

Let us now turn to the physical examination of the patient. The heart pulsates above the line of the nipple in the third interspace, the apex beat being fully two inches higher than usual. There is no murmur over the heart, and there is no cough. The pulmonary resonance is normal all over the chest. The amount of dullness that can be developed over the liver is very slight, the resonance from the distended intestines almost meeting that of the lung. A glance shows you the remarkable figure of this patient. He looks like a man with enormous ascites from cirrhosis of the liver. There is uniform and extreme distension of the abdomen. From the history which has been given, it is evident that this enlargement is not due to the presence of liquid, but to the accumulation of gas in the intestine. He passes large quantities of wind from the bowel, and what is passed is very offensive. The surface of the abdomen is not smooth as it is in ascites, but there are varying curves and depressions, mapping out especially distended portions of the stomach and intestinal canal. The abdominal veins are slightly distended, forming in places little stellar groups, but there is not the great distension of the abdominal venous channels which is seen in cases where the obstruction to the abdominal circulation is as great as comes from cirrhosis or other mechanical obstruction. In the epigastric region the abdomen is remarkably prominent. In the hypogastrium, the distension is much less. On percussion, there is resonance everywhere, but the resonance varies in degree. Over the lower portion of the abdomen, the resonance is high pitched, and has a hardness about as though the intestine, while greatly distended, also contained some fluid or solid material. Over the prominence which occupies the upper zone, the resonance is loud and of great volume. The bowels have been opened once or twice for the past few days, this action having been produced by the medicine which he is now taking. The stools consist of one piece of hardened feces, about two inches long, and of the thickness of the thumb. He has passed feces in the shape of balls, but he has never noticed any ribbon-like feces.

If there were any narrowing at a portion of the bowel which would interfere with the passage of hardened feces, we should probably find some

evidence of it in the shape of the evacuation. This is to a certain extent a reliable sign of the existence of mechanical obstruction low down in the intestinal canal; and by the term "low down" I would imply a narrowing in the colon or lower part of the ilium, because by the time the feces have reached the point mentioned, their consistence is such that if they were forced through a constricted portion of intestine they would probably retain the shape given to them. Mechanical obstruction high up in the small intestine will not reveal itself in the shape of the feces, because at this point they are liquid or semi-liquid in consistence, and there may be a very close obstruction, requiring that the contents of the bowel be extremely liquid before they can pass, and yet the stools give no sign of its existence.

It must be admitted that in this case the stools afford no evidence of the existence of mechanical obstruction; and if such obstruction is present, we may exclude the idea of its being low down in the intestinal tract, and infer that it must be high up in the ilium or jejunum.

The common lesions of the intestinal mucous membrane, such as ulceration and the like, which give rise to the narrowing of the bowels and consequent mechanical obstruction, are far more common in the colon and the lower portion of the ilium than in the higher bowel. The lesions of dysentery, and those of severe ulcerative enterocolitis, the common form of grave summer complaint in children, are of course more marked in the colon and ilium than in the jejunum, and therefore if the contraction follow the cicatrization of an ulcer, it is most likely to be in the lower part of the bowel.

We cannot very well determine from the shape of the abdomen, the situation of a mechanical obstruction, supposing one to exist. The extreme distension obliterates the usual landmarks, and the dilated bowel thrusts itself over the viscera, preventing us from recognizing which portion of the intestinal canal presents. At first glance we might think, from the immense size of the epigastrium, that the stomach was in a state of gigantic enlargement and dilatation; but this appearance is very deceptive, and as I am speaking, you have an illustration of what I am saying. You see as the wave of peristaltic motion passes over the abdomen, that this prominence is divided by a deep sulcus, which is quite a different appearance from what we should expect if this were one large cavity. This is probably an immensely distended coil of intestine, but it is impossible for me to say whether or not any portion of this prominence is made up by the stomach. The only way in which this could be determined would be by a careful catheterization of the stomach—see how far an olive-shaped bougie will pass, and then measure the distance externally; and by injecting warm water and noting its capacity, washing it out and seeing what effect this has upon the distension.

(To be continued.)

—A physician called to attend a sick person in Reading, Pa., recently reported that the house containing four rooms, was occupied by "seventeen persons and eight dogs."

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

The Bacillus Tuberculosis and the Etiology of Tuberculosis. Is Consumption Contagious?

BY H. F. FORMAD, B. M., M. D.

(Continued from page 297.)

Koch asserts that the structural peculiarities of the tissues which I described can have no etiological relation to tuberculosis, because an animal not possessed of such tissue peculiarity—the cat—is easily inoculable by tuberculous material. Here I must differ from Koch, as in my experience with cats this is not the case; and, again, Koch brings no proof for his assertion, and I am unaware that he, or anybody else, produced tuberculosis in a cat, except by inoculation into some serous cavity. That inoculations into serous membranes prove nothing for tuberculosis, as I have shown conclusively, Koch still seems to fail to see. But here is a way in which cats may become tuberculous, with or without the bacillus. In one instance, we kept one of the cats in a close box, *deprived* of liberty, good air, the comforts of life, motion and sufficient food; she also had been inoculated with diphtheritic material eight months previously, but had recovered. After the lapse of a year, the cat was set free; but was accidentally killed, and was found to be affected by general tuberculosis in a high degree.

This, in my opinion, corresponds fully to the conditions in which a healthy young woman is placed, and finally becomes scrofulous, and then tuberculous, from a simple cold, after being the faithful nurse for a couple of years of a consumptive husband.

On the other hand, there is full reason to believe, as it is in accordance with experience, that young scrofulous persons, under proper conditions, may become normal individuals; *i. e.*, lose or outgrow the predisposition to tuberculosis. (I have dwelt upon this in my first communication on this subject.)

The scrofulous habit, and consequently also phthisis, may skip a generation, and does not invariably embrace all members of a family. It has been observed that parents may have at first healthy children without any vice, who grow old well; and subsequently the same parents, without being phthisical (but perhaps otherwise becoming deficient in health), may have other children that exhibit a full scrofulous habit. But even the reverse has been observed.

It would be highly desirable if physiologists would furnish some experimental observations on the circulation of the plasma in the lymph-spaces. This is, to my mind, a circulation or movement of vital juices in the tissues, which, for the well-to-do of the individual, is of importance next to that of the blood. These important channels, the lymph-spaces, are known to regulate the blood-pressure, carry and breed (white blood corpuscles) food for the tissues, lubricate tissue, and relieve the body, if any of its parts are damaged by injury of any character, of inflammatory exudates, dropsy, etc. These channels are nearly blocked up, nearly useless in the *scrofulous*, and hence cannot perform their functions; and thus modify

materially the condition and the fate of the individual, in case of disease.

The term "*scrofulous*," which I retained for describing the above-stated anatomical peculiarity of animals and individuals, is as good as any other term; moreover, it is known by all as designating the "predisposition" to tuberculosis. Scrofulosis should be called a *condition* and not a disease, as it has its (a natural) hereditary and widely-distributed type in man, and its homologue in some normal animals (rabbit, guinea-pig, etc.). It must be remembered that the scrofulous individual acquires certain lesions, such as enlargements of the lymphatic glands, cold abscesses, caries, long standing catarrhs of various kinds, skin eruptions, and certain deformities of bones, only under the influence of injuries, or of the same agencies which, in the non-scrofulous individual, lead to transient and curable affections.

Virchow designates simple, permanent enlargement (hyperplasia) of lymphatic glands, with or without cheesy change, "*scrofulous*" in contradistinction to "*tuberculous*" lymphatic glands, which contain miliary tubercle nodes (heteroplasia), and which also undergo cheesy change.

There is nothing called "*scrofulous*" or "*scrofulosis*," which by others is not also called "*tubercle*" or "*tuberculosis*." There are, strictly speaking, no scrofulous products, but only tuberculous products. The traditional term "*scrofulosis*" is variously used and interpreted, although it is not evident that any one means by it anything anatomically well defined.

Others take matters easier, calling everything *tuberculous* that contains tubercle bacilli, and calling scrofulous all cheesy matters in which bacilli are absent.

There is still a third aspect of this question, viz., the parasitic or bacillary theory of the predisposition to tuberculosis. As I mentioned in the earlier part of this paper, Baumgarten, Marchant, and several others, recently brought forward that not only tuberculosis, but that even the predisposition to tuberculosis is to be explained by the susceptibility of an individual to bacilli! Under this hypothesis, the scrofulous tendency in individuals is created through the mediation of the bacilli. It is supposed that the bacilli or their spores may be conveyed to the ovum by the organization of the mother, or in utero by the spermatozooids of the father. Furthermore, they say, inheritance is to be explained in no other way than by a bacillary infection of the infant through the milk of the nursing mother, and by subsequent living together of children and phthisical parents. We may exclude such view altogether from consideration, as it has not been proven. Besides, it is not in accordance with facts from observation. It is as contrary to biological laws to accuse parasites for the transmission of a predisposition to tuberculosis, as it would be for that of epilepsy, etc. Hence, we may dispose of such view as an unfounded, absurd hypothesis.

I am not opposed to the germ-theory of disease, where it has its well-founded and proper application. Bacteridian studies have contributed largely to our knowledge of a certain class of pathological processes and lesions. But misinterpretations of

the significance of bacteria; bacillary speculations, without occasion for them and without any proper application to the subject, are a check to the progress of medical science. The question of the predisposition to, and the cause of, tuberculosis, demands a great deal more of solid pathologico-anatomical and experimental studies; it can, by no means, be regarded as settled, and least of all through the discovery of a bacillus inhabiting necrotic tubercular tissues.

3. Tuberculosis, without Predispositions, Due to Inflammation of Serous Membranes.

For some years I felt much interested in the question whether or not simple inflammation of serous membranes could lead to tuberculosis in the non-scrofulous, that is, in persons which have no family history of tubercular disease; and I would like to ask the opinion and experience of the members of the Society upon this question. It is well known that there may be primary tuberculosis of serous membranes, producing secondary inflammations; and, on the other hand, tuberculosis secondary to adhesive pleurisy or peritonitis is also common in serous membranes. The general belief, however, is that whenever tubercular disease in either case occurs, if not secondary to phthisis or tubercular disease elsewhere, a strumous or scrofulous condition is required.

Traumatic injuries of joints are known to lead often to fungoid (tubercular) synovitis and general tuberculosis, occasionally in individuals with good family history. Simple injuries of the eyeball (the anterior chamber as well as joints is lined by serous membranes), under conditions as above stated, have also been known to lead to tuberculosis, as recorded by Wolfe (*Brit. Med. Jour.*, March, 1882); Gradenigo (*Annale d'Oculistique*, 1870).

Dr. M. Litten,* of Berlin, was the first to publish some accounts which demonstrate that miliary tuberculosis may be caused directly and primarily by pleurisy and inflammation of other serous membranes in persons with no phthisical history, and without any cheesy masses being formed in any part of the body. In his (Litten's) experience this was particularly the case when there was a rapid reabsorption of the exudates in case of chronic pleurisy, or if repeated removal of the fluid of a hydrothorax or ascites by tapping has been performed. He records several well-studied cases of that kind, accompanied by autopsy records. Litten's observations at no time, however, received their well-deserved attention.

Not only clinically, but also pathologically, this part of the tuberculosis question is rather neglected. In text-books of pathology the occurrence of primary tubercle in adhesive bands is incidentally mentioned, but no special consideration is devoted to its etiology and manifestations.

Upon the autopsy table I have repeatedly met with subjects with exquisite primary tubercular peritonitis, pleurisy or pericarditis, which, upon

*M. Litten, Sammlung Klin. Vorträge, No. 119. Ueber acute Milartuberculose, 1877. For further references see Wiener Med. Presse, No. 36, 1882 Charité Annalen, vol. vii, Berlin; Krankheiten der Respirations-Organen, in Virchow's Handb. der Spec. Path. und Ther., vol. i.; Virchow, Geschwulste, vol. ii., p. 725, etc.; also, Formad, Transactions of the Philadelphia County Medical Society, and of the Pathological Society, for 1882-83.

inquiry into the history of the cases, failed to reveal any phthisical or scrofulous history. The products of these inflammations were often plastic in character, not unlike those of fungoid synovitis. The appearances sometimes present themselves particularly strikingly in the peritoneum; all the viscera may be glued together by plastic material into a solid mass. The omentum is usually retracted and matted together into a solid cord or mass, which, lying parallel with the transverse colon, reaches across the abdominal cavity, and may have a thickness of from two to four inches; the mesenteric and other lymphatic glands are usually normal, but sometimes in advanced cases may be much enlarged, and more or less cheesy. The perfect absence of any cheesy focus in the body is, however, often a conspicuous feature in these cases.

Some pathologists deny the tubercular nature of these formations, and of the flat nodular masses which cover the serous surfaces in these cases. It is true that fibroid changes predominate in these formations; but numerous tubercle nodules, with all the necessary attributes, epithelioid and giant cells, and necrotic changes, were plainly seen in all cases which I had occasion to examine. Secondary miliary tubercles of quite recent date are also found thickly strewed locally in these parts, and may or may not be seen in the lungs and other organs. As a rule, there is more or less ascites in these cases. My colleague, Dr. E. O. Shakespeare, has recorded similar cases, and Dr. Morris Longstreth tells me also that he had seen and studied such cases. Dr. Mitchell Prudden describes (*New York Med. Record*, June 16, 1883,) an allied case.

In chronic adhesive pleurisy there occur similar primary tubercular formations in the organized plastic exudate, which in some cases gives rise to secondary (miliary) tuberculosis of other organs. The lungs may be perfectly normal in all parts, and show only peripherally, just below or bordering the pleura, some indurations of gray color made up of recent tubercle tissue. These young tubercle infiltrations are in some cases seen to have penetrated into the substance of the lung, like in a pleuro- or dissecting-pneumonia, directly from the old tubercular masses of the adjacent pleural membrane.

I have also examined several cases of plastic adhesive pericarditis, and found the plastic vegetations in this lesion to contain tubercles; two of these had coincident pleuritic lesions.

Cases which came under my observation during the last eighteen months—i. e., since the opening of the bacillary campaign—were, of course, carefully examined for bacilli, and the results may be summarized as follows: bacilli were found in most of the lesions, if the tubercular disease of serous membranes was accompanied by cavities and cheesy masses in the lung, or by tubercular ulceration of the intestines, and if cheesy changes in general were prominent; but no bacilli could be discovered, even after repeated and careful search, in any of the lesions of four cases of primary peritoneal and pleuritic tuberculosis examined. In none of these latter four cases were there any conspicuous cheesy changes in any organ, and no cavities or marked hepatizations in the lung, and no intestinal ulcers, although in two there was

slight pulmonary miliary tuberculosis. These cases will be recorded in detail in a future publication.

I have also seen several cases of primary tubercular pleurisy and pericarditis, and a few of primary tubercular peritonitis, in the pathological institutes of Virchow in Berlin, and of von Recklinghausen in Strassburg. I questioned these foremost men of pathology concerning the etiology of these lesions. They, as well as Rindfleisch, of Würzburg, told me personally their opinion, stating their firm belief that these lesions often directly originated from simple chronic inflammatory changes, without the agency of any cheesy focus, or any specific agencies whatsoever.

Birch-Hirschfeld also states, in his classical pathological work (page 183), that "nearly every exudative pericarditis, and pleurisy leads to a local tuberculosis, if it takes a chronic course."

How often primary tubercular lesions of serous membranes occur in non-scrofulous persons, and whether this is the only form of tuberculosis in this class of persons, is, of course, a matter of speculation, until thorough statistics and careful studies are made in this direction. Nevertheless, it is a demonstrated fact, as I will show further on, that primary tuberculosis can be produced in the peritoneum of animals, like the dog, which are proved not to have any scrofulous tendency. I have seen this myself, and have seen O. C. Robinson, in my laboratory, succeed in this experiment, by the introduction of simple irritants into the peritoneal cavity. Koch also never succeeded, even with the bacillus, in producing tuberculosis in the dog, except when using the peritoneal cavity or the anterior chamber of the eye (which is also a serous sac) as a point for inoculation.

Here is room for hypothesis. I would prefer to believe that tuberculosis could occur only in scrofulous persons, as this would better agree with the *scrofulous anatomy*. It is, however, possible that a scrofulous anatomy of the tissues may be artificially established by the blocking up of the lymph-spaces of the serous membranes, by fibrine and molecular *débris*, suspended in the serum, which is being reabsorbed. This would then be a mechanical process, and not one of infection. If an inflammation occur in serous membranes, resolution becomes difficult through the peculiarity of the exudate. This is fibrinous mainly, and forming extensive, usually permanent organized deposits, it impairs the function of serous surfaces quite materially; the reabsorption of new exudates is probably sometimes entirely impossible. Thus conditions may possibly be created in serous membranes, not unlike those of scrofulous tissues; and simple irritants, perhaps the fibrine, may induce in them a similar reaction.

4. Question of Contagiousness. Clinical Aspects.

The idea of the contagiousness of tuberculosis is not new, and, like other unfounded views in medicine, it has oscillated, like all fashions will, from one extreme to another for many generations. At present it is entertained by a number of scientists, and by a part of the profession. This view has called forth, from time to time, a number of researches whose results were either pro or contra. I will refer to these subsequently.

Of late, it appears that the belief in the con-

tagiousness of tuberculosis has won considerable ground, not so much on account of accurate observation as on account of Koch's discovery of the bacillus tuberculosis.

Another element, which seems to have had an influence in this direction, is the fact that certain experimenters, formerly believing, from their own experiments, that tuberculosis was non-contagious, were led, later on, to change their opinions on account of the results of subsequent experiments. These latter experiments will, however, be shown not to be conclusive.

Before discussing the merits of the bacillus question, I would like first to consider the question of contagiousness from clinical grounds; and should it be proven that tuberculosis is not contagious, then the necessity for a contagium surely falls to the ground.

According to the observations of the most prominent clinicians who have paid special attention to this matter, there is not a single authenticated case of tuberculosis as a result of contagium on record. Among scores of experienced men who deny thus the contagiousness of tuberculosis, it is sufficient to mention the names of Virchow, v. Reclinghausen, Stricker, in Germany; Gull, Williams, Watson, Paget, Humphrey, Richardson, in England; Bennet, in France; and Hiram Corson and Traill Green, in our own midst—all men of close observation, with ripe experiences reaching over thirty to fifty years.

The statistics of the large Brompton Hospital for Consumptives, for thirty-six years, with regard to the resident officials, compiled by Dr. F. Williams (quoted after the *Lancet*, 1883), shows that of four resident medical officers, one of whom had served twenty-five years, none had any lung disease; of six matrons, none were consumptive; of 150 resident clinical assistants, eight became consumptive, and five died, but in only one was the disease developed during residence at the hospital. Since 1867, of 101 nurses, only one died from phthisis, and that after leaving the hospital. Before 1867, six died, three of these of phthisis, but only one became so whilst resident, and she had a consumptive sister. She died thirteen years after first joining the hospital, but was not there the whole time. Of thirty-two gallery maids since 1867, none developed phthisis whilst at the hospital. Of twenty house-porters, five died, but none of consumption. Non-residents:—Of nine secretaries, three were threatened with lung disease, but recovered. Of twenty-two dispensers, seven died, three of phthisis, one while at the hospital. Of four chaplains, three died, none of phthisis. Of twenty-nine physicians and assistant physicians, eight died, none of phthisis. At the Chest Hospital, Victoria Park, there have been five resident medical officers during about the last fifteen years; all are alive and well. Two matrons, neither consumptive. There were two clinical assistants appointed every three months: none known to have developed the disease at the hospital. One nurse out of fifty or sixty in the last few years became consumptive while at the hospital, and she died after a year's illness.

An ingenious plan to decide the question of the communicability of phthisis was instituted by the British Medical Association by establishing the Collective Investigating Committee. This com-

mittee sent out questions relating to this subject to all the members of the Society. Of 1028 replies received, 673 negatived the idea of a contagium, while 261 replies favored it. According to these statistics, there is a manifest majority in favor of the non-contagiousness of phthisis; yet such a plan is unsatisfactory, as the answers may be of unequal value, as their worth must be estimated in proportion to the experience and authority of the sender.

Not without interest is the observation of Prof. Corradi, of Pavia, who noted that out of 133 families in which he had cases of consumptives, in only twenty-five of the families were there more than one member of the family ill of that affection.

There is no proof whatever that tuberculosis is conveyed from person to person by contagion. Seeming exceptions to this assertion can almost always be accounted for in some other way.

The assertion that the wife may contract the disease from the husband, I have pointed out in a former paper to be untenable; and I have also indicated that a predisposition to scrofulosis may be acquired from the unwholesome mode of life led, of necessity, by such individuals. Besides, it is established statistically that nearly one-third of all deaths occurring in middle life are due to phthisis. In view of the frequency with which this malady occurs, intermarriage between scrofulous individuals may be almost as common as between non-scrofulous ones.

The view taken that children become scrofulous by contagion from phthisical parents, may be met by the fact that instances have occurred where a number of young children of phthisical parents were early removed from their homes and distributed among healthy families, and yet all, sooner or later, became phthisical.

Healthy persons have even been fed on bovine tuberculous material (which is considered identical with human tuberculous material) and have thrived on it, as is proven by the interesting feeding experiments made upon man and recorded by Schottelius (Virchow's Archives, No. 91, 1883). The circumstances which led to this experiment were as follows: In Würzburg, the sale of meat affected by pearl disease or bovine tuberculosis is permitted, but, as some opposition to the sale once arose, a community of country people agreed to use exclusively tuberculous meat, on account of its cheapness, and in order to prove that it was harmless. From October 1867, to November, 1868, forty-nine tuberculous beeves, with well-pronounced lesions, were consumed by these people while they were under the supervision of the district physicians. In many instances the meat was even eaten raw in consequence of habit. Ever since then, those people have continued the use of tuberculous meat, and thus far no bad results have been noticed; in fact, the record says that the people referred to are unusually healthy.

—Dr. Dehenne writes in *L'Union Médicale* on the surgical treatment of interstitial keratitis. He recommends the performance of an iridectomy. Iridectomy, he avows, cures the disease in some days, and consequently confers immense benefit on the patient.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Etiology, Pathogenesis, Treatment and Prophylaxis of Pulmonary Tuberculosis.

The *London Med. Record*, February 15, 1884, tells us that Prof. Sormani contributes an important and interesting article to the *Annali Universali di Medicina*, September, 1883, under the above title. The numerous observations now recorded in many countries confirm the importance of the discovery of Koch, of the bacillus of tuberculosis, in diagnosis and prognosis. The presence of the bacillus in the sputa, pus, and other secretions, and in the tissues and organs, is a certain indication of the tubercular process, and is sufficient to establish its diagnosis. The absence of the bacillus in the excretions, if repeatedly confirmed, with rare exceptions only, renders it certain that the affection is not tubercular. If the bacilli be abundant, long, sporigenous, and in groups, there is an active proliferation of the micro-organism, and the disease will probably run a severe and rapid course. For the microscopic examination of the bacilli the author prefers Ehrlich's method, modified by Weigert. A thin layer of sputum, spread on a cover glass, is dried over the flame of a spirit lamp, and then immersed in the solution of gentian-violet (Weigert's formula: gentian-violet, 1.5 parts, dissolve in 15 parts of absolute alcohol, add 3 parts of oil of aniline, and dissolve in 100 parts of distilled water.) It should remain in this solution for fifteen or twenty minutes, or longer; it is then rapidly passed into dilute nitric acid (50 per 100), then into alcohol, and then into a weak aqueous solution of vesuvine, and, lastly, well washed in absolute alcohol. The preparation may be mounted in oil of cloves, castor oil, or dammar varnish. Sections require three or four hours to take the color, and should generally be allowed to remain twenty-four hours.

Prof. Sormani has made many experiments on the inoculation of animals with tubercular matter. The results of these experiments are published in the *Rendiconti del R. Istituto Lombardo*, July, 1883. Inoculation with sputa containing bacilli gives rise to tuberculosis, which is developed more rapidly when the bacilli are abundant. The inoculated bacillus multiplies in the organism, and invades the lymphatic system, liver, spleen, and serous membranes; by its presence it sets up a chronic inflammatory process, with formation of products which become caseified, and subsequently soften, producing gradual destruction of the organs. The bacillus is found in the centre of the tubercles in their earliest stage of formation, and hence is the cause and not the effect of the morbid process. The lymphatic vessels, amœboid cells, and the blood-current, are the means by which these micro-organisms are transported from one organ to another and diffused throughout the body. Koch's discovery gives us a new indication as to treatment. It is reasonable to suppose that a substance may be found which, while innocuous

to the individual and to the function of the diseased organ, may act on the bacillus or its substratum, and so arrest its proliferation.

Recent studies on the artificial culture of morbi-genic germs and other micro-organisms, show that these organisms are very capricious, and that it is sufficient to modify very slightly the cultivating menstruum to arrest their proliferation. In the artificial cultivation of the *aspergillus niger*, an infinitesimal trace of nitrate of silver renders impossible the vegetation of this microscopic fungus (Duclaux, *Ferments et Maladies*). The problem is to find some substance which, while harmless to the system at large, may yet prevent the growth of the tubercle-bacillus. Many antiseptics have been tried to this end. The fumes of sulphurous or nitrous acid are fatal to the bacillus, but are not respirable. Corrosive sublimate in a solution of 2 per 1,000 does not destroy the bacillus (Vallin).

Iodoform has been tried in many ways. The author gives it internally in the dose of 50 centigrammes daily, and by inhalation in the following manner: A Woulff's bottle with two necks is taken; into one neck is inserted a glass tube, which reaches nearly to the bottom of the bottle; into the other a short tube is placed, which is connected with an India-rubber tube, having at the other end a respiratory mask; to the longer tube is fastened a cylinder containing compressed air (Waldenburg's apparatus. *Die Pneumatische Behandlung*: Berlin, 1876). In the bottle is placed about 50 grammes of iodoform, previously finely powdered, with the addition of a little ether. When the apparatus is used, the compressed air passes through the Woulff's bottle, and the strong current of air takes up a part of the iodoform and carries it into the lungs. To facilitate the volatilization of the iodoform, the bottle may be placed in water and heated up to 100° (decomposition of the iodoform only takes place at 120°). The greater part of the iodoform inhaled is arrested in the bronchial tubes, but in animals some reaches the alveoli themselves. At first one only of Waldenburg's cylinders a day was used; the number was gradually increased to ten. The iodoform was never irritating; it was absorbed, and could be recognized in the urine by nitric acid and sulphide of carbon. After about a month of this treatment, the patients had notably improved; fever and night-sweat had disappeared; and the cough and expectorations were much diminished. In three months they had gained from 5 to 12 kilogrammes in weight, but the bacilli had not entirely disappeared from the expectoration. The great diminution of the expectoration, however, proved that the proliferation of the micro-organism was much less active. The local mischief was arrested; the vital capacity of the lung was rather diminished than increased; and this is in harmony with the fact that cicatrization is taking the place of the destructive process.

Koch's process to prepare the gelatine for the artificial cultivation of the bacilli takes a week or

more. Dr. Sormani finds that it can be quite as well and much more quickly obtained by heating in a water-bath calf-serum previously filtered and rendered alkaline by the addition of crystallized carbonate of soda. His best cultivations were made with this gelatine in watch-glasses, soldered together with mastic and silicate of potash. Out of sixty attempts, in six only were developed the little greyish-white, sometimes yellowish, patches described by Koch; these patches contained very numerous oval spores, united in zoogloea, and immovable, of uniform size, the greatest diameter being one micro-millimetre. On the addition of a liquid, the peripheral spores become detached, and acquire a vivacious oscillatory movement. Later appear very fine transparent oscillating bacteria, two to seven micro-millimetres long, or even more, articulated, granular, and, like the spores, strongly coloring with gentian violet. Among the spores and bacilli, numerous crystals of chloride of sodium and carbonate of soda were visible. The uncertainty still existing as to the value of the spores and bacilli obtained as the products of cultivation, and the great tendency of these cultivations to fail, render it premature to decide on the efficacy of the various therapeutic agents from the negative results only obtained by artificial cultivation.

Dr. Sormani agrees with Marchiafava that the bacillus is not found in the breath of the phthisical. The bacillus is preserved unaltered in the expectoration for a very long time, and resists putrefaction and desiccation, and preserves its virulence. Tuberculosis is not directly contagious, but indirectly it is, by means of the dried, powdered tubercular sputa which float about as dust in the air.

In the prophylaxis of tuberculosis, the prompt destruction of tubercular sputa, and the efficacious disinfection of the rooms and objects soiled by tubercular matter, must be chiefly insisted on.

A Clinical Observation in Support of the Theory of the Contagiousness of Pulmonary Consumption.

Dr. Frank Ogston thus writes in the *Brit. Med. Jour.*, February 2, 1884:

From all that could be learned of the family history of Mr. and Mrs. G., no suspicion of an hereditary tendency to consumption could be traced; on the contrary, both his and her forefathers had been noted as being healthy and long-lived, and they themselves, at the ages of fifty-seven and fifty-five respectively, are quite hale and strong. Their family consisted of six sons and two daughters, between the ages of thirty-one and twelve; and they had been strong and healthy children, with no apparent tendency to disease.

About three years ago, the third son (George) caught cold, as it was said, and came from his home in Glasgow, where he was living with his wife, to be nursed in his father's house in Aberdeen. He was examined by a medical man in town, who stated that he was suffering from pulmonary consumption; and he died about two months afterwards. The accounts of his illness leave no doubt that the disease was correctly diagnosed, and that it had run its usual course.

There is an obscure history that some of the

members of George's wife's family had died of consumption; but she had none of the symptoms of it, and was quite well when last heard of.

George had been nursed by his sisters, Kate, aged then about twenty-one, unmarried, and Mrs. B., aged eighteen, since married, who, it is stated, were then both stout, healthy girls.

The first month after George returned to his father's house, a younger brother (Charles), aged fourteen, slept in the same bed with him, but afterwards, for convenience of nursing, went into another room.

Shortly before George's death, Kate began to lose color and flesh; but little notice was taken of her, as it was ascribed to fatigue and grief for her brother.

In July, 1882, I was called to see Mrs. B., who had been married a few months previously, and who occupied, with her husband, part of the same house with her parents. I found consolidation of the right apex, and a larger patch of consolidation in the left apex, which had just commenced to break down. She had an anæmic appearance, but was fairly plump. Her forenoon temperature was generally about 100°, but she had no night-sweats. The paroxysmal cough was the chief source of complaint. The disease progressed rapidly, in spite of cod-liver oil emulsion, Coghill's inhaler, etc.; and, in November, she died in a few minutes from an attack of hæmoptysis. She had become rapidly emaciated, and both lungs were extensively broken down. The sputa, which had become abundant, swarmed with bacilli.

During Mrs. B.'s illness, my attention was called to her sister Kate, who was nursing her, and I found in her also apical consolidation to a slight extent, with rapid pulse and an anæmic appearance. She had no cough at that time, and seemed to improve when ordered hæmatonics and separation from her sister.

During the same summer, a boy came to my house from time to time, complaining much of shortness of breath and weakness. On examining his chest, I found a suspicious dullness at the left apex. I gave him quinine and iron tonics, and he improved for a time. I did not see him for a few months; but one day I found him in Mr. G.'s house, when I discovered that he was one of the family—in fact, Charles, aged now nearly seventeen.

From time to time I visited Kate and Charles, who became gradually worse; and in a few months they died, with all the symptoms of phthisis, within a few days of each other.

There now remain four sons: the eldest, a tailor's cutter, is married, and has two strong and healthy boys; the second, a saddler, is the picture of vigorous manhood; the third, a sailor, who came in point of age between George and Kate, is a strong and vigorous man, who has come through many hardships, having been several times wrecked: "on one occasion, he was in an open boat on the Atlantic for fifteen hours, with no clothing but his night-dress, and then three days with only a suit of oil-skins above the night-dress" (a brother's statement); and the youngest, a boy now of fifteen years, is a draper's apprentice, and is strong and healthy.

Here, then, we have a man suffering from consumption brought into a healthy household, in-

fecting first a brother, who slept with him, and then his sisters, who were engaged nursing him; while his four remaining brothers, who came little into contact with him, escaped. The presumption of contagion seems strong.

Note on the Treatment of Eczema Marginatum, and of Ringworm in General.

Dr. R. W. Taylor thus writes in the *Jour. Cut. and Ven. Diseases*, February, 1884:

I have always placed much confidence in the parasiticide virtues of bichloride of mercury in the treatment of the various forms of ringworm, and have generally used it in alcoholic solution, being in accord with Cavafy in the opinion that, thus used, its efficacy is much enhanced. Even thus combined, its action is not always certain, particularly in cases of eczema marginatum. This fact was very forcibly brought to my mind in the treatment of the case of a young lady during the past summer. She had this affection, severely involving the integument of the hypogastric, pubic, crural, and gluteal regions. The diagnosis was confirmed by the discovery of the parasite in the scales, but the appearances of the eruption were thoroughly typical. I ordered a two-grain solution of the bichloride of mercury in one ounce of alcohol, which was used for about a week, when I increased the strength to four grains, as the progress was not satisfactory. Though the parts were carefully sopped with this solution three or four times a day, and care was taken that the underclothes should be frequently changed, the rings of eruption advanced, in many parts being preceded by outlying papules. The pruritus was only relieved for a limited period after each application. In this state of affairs, it occurred to me that, if I could find some vehicle by which the parasiticide could be kept continually over the morbid surfaces, and not be rubbed off, I could soon effect a cure. It happened one day when the progress of the case was thus at a stand-still, that I had on my office-table a bottle of tincture of myrrh. The thought occurred to me that, if the liquid was painted over the surface, a very thin, flexible layer of gum resin would be left which would retain the bichloride of mercury in contact with the skin. I, therefore, first thoroughly bathed the parts with a four-grain-to-the-ounce alcoholic solution of the bichloride, and, when dry, painted the whole surface with the tincture of myrrh. The lady reported, the next day, that she was much better, and had not scratched very much since the application. I then gave her a prescription containing four grains of the bichloride to the ounce of tincture of myrrh, with directions to thoroughly paint the parts twice daily. The effect was simply wonderful. In a few days, the patches and rings became less rigid, the papules less salient, the pruritus was relieved, and, within a fortnight, the disease was wholly cured. I have since used the simple and compound tinctures of benzoin in the same way, and find that they are equally as valuable in affording a vehicle for the parasiticide and a protective film to the integument. The discomfort of the application of these tinctures is very slight; patients simply complain of a little drawing or tight sensation of the parts, for a few

moments after the application—inconveniences which are more than counterbalanced by the relief of the pruritus. I have thus far used this method in three cases of eczema marginatum and two of tinea tonsurans capitis; in all with most excellent results, namely, a prompt and perfect cure. Whether the gum resins have any therapeutic effect, I am unable to say. I think that these tinctures can be still farther used with benefit as a vehicle for other agents in the treatment of skin affections.

A Ready Method for the Detection of the Bacillus Tuberculosis.

Dr. M. B. Hartzell thus writes in the *Med. Times*, January 26, 1884:

Since Koch first announced the discovery of the bacillus tuberculosis, methods for its detection have multiplied rapidly. Most of these methods, however, are more or less complicated, are uncertain, and require too much time for their execution to be of use clinically.

On account of its simplicity, and of the short time required to execute it, I wish to add another to the many staining processes already in use. This process appears to me to possess decided advantages over all others with which I am acquainted; by means of it the sputa of patients who are supposed to be tuberculous can be easily and rapidly examined, and the bacilli are so deeply stained that if any are present in the specimen under examination they cannot be overlooked, if ordinary care is used. The process is briefly as follows: A small quantity of sputum is spread as thinly and evenly as possible upon an ordinary glass slide; it is allowed to dry, which takes but a minute or two, and is then passed slowly several times through the flame of an alcohol lamp or Bunsen burner. One or two drops of the fuchsin solution, recommended by Gradle, and prepared as follows—carbolic acid, mxv ; distilled water, $\text{f}\text{.}\text{ss}$; dissolve, and add saturated alcoholic solution of fuchsin, $\text{f}\text{.}\text{ss}$ —are placed upon the sputum thus prepared, and allowed to remain from three to five minutes. The slide is now washed thoroughly with distilled water, to remove the excess of fuchsin, and the stained sputum completely decolorized by means of a saturated solution of oxalic acid. It is again thoroughly washed in the distilled water after the decolorization, and allowed to dry. It is now ready to be mounted in glycerin or balsam for examination. With a power of five hundred or six hundred diameters, the bacilli will appear as brilliant red rods, no staining of the background being necessary.

In all other methods with which I am familiar, the decolorizing agent employed is dilute nitric acid; but this, besides being disagreeable to handle because of its corrosive and staining properties, is apt to remove the color from the bacilli too, unless great care is taken. Oxalic acid, however, seems to leave the dye untouched in them.

To render the process still clearer, the different steps may be arranged thus:

1. Spread the sputum upon the slide, dry, and pass through the flame of the lamp.
2. Stain with the fuchsin solution three to five minutes.

3. Wash in distilled water.
4. Decolorize with oxalic acid.
5. Wash again thoroughly in distilled water, dry, and mount in glycerin or balsam.

Bleeding in Delirium Tremens.

Dr. E. J. Kempf reports this case in the *Louisville Med. News*, March 8, 1884:

M., a merchant of the village, called at my office one morning before daybreak, and aroused me. He was in a desperate plight, hatless and coatless; with bloodshot eyes and inflamed eyelids, trembling hands, and a nervous condition of the body. He told me candidly that he had been drinking greatly to excess for the last six weeks, that he had not slept a wink nor eaten a bite for the last sixty hours, and that he felt as if he were either getting crazy or getting the fits.

The patient was a stout, well-built, corpulent man; a high liver, one who had drunk intoxicating liquors more or less all his life. On account of business cares he had lately lost all control over himself, and been, as he himself expressed it, drunk for the last six weeks. I persuaded him to return home, and prescribed rest, small doses of stimulants, liquid, nutritious diet in small quantities, large doses of bromide of potassium and hydrate of chloral alternated, and saline purgation.

The next morning I found the patient somewhat calmer, but with a full, bounding pulse, and temperature of 102° F. His head ached and felt dull, and he seemed apprehensive of some calamity or mishap. He had slept about an hour during the night at broken intervals; he had been bothered very much by dreams and "foolish thoughts." His bowels had moved freely, the feces being watery, blackish and foetid. I advised bleeding, to which the patient readily consented. I accordingly opened a vein in his right forearm, and let blood flow to the amount of fully three pints, when the patient, who was sitting on a chair with a cane supporting his arm, fell from the chair to the floor in a faint. Large drops of perspiration stood on his forehead, and his skin had a cold, clammy feeling; his pulse was now very feeble. We put the patient to bed, and covered him with quilts, and in a short time he rallied. I now ordered absolute rest, milk frequently and in small quantities, and one-eighth grain of morphine every five hours. The patient was in his store two days afterward, asserting that he was entirely well. The marked benefit derived from the bleeding in this case induced me to make a report of it.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—Dr. H. F. Hendrix, of St. Louis, in a reprint before us, describes a remarkable case of arrest of development caused by intra-uterine pressure. He considers that the history of this case will go far to substantiate the theory that most congenital deformities and monstrosities are

to be accounted for by the position which the fœtus occupies in the uterus, and the scarcity of amniotic fluid, in consequence of which the walls of the uterus are allowed to come too forcibly in contact with the embryo, causing it to retain almost any shape which it may accidentally assume.

—A careful report of a case of extirpation of the ovaries by the Battey-Tait operation is given in a reprint from the *Denver Medical Times*, by Dr. Thomas H. Hawkins.

BOOK NOTICES.

Medical Education and the Regulation of the Practice of Medicine in the United States and Canada. By the Illinois State Board of Health. Pp. 270. Chicago: W. T. Keener, 1884.

The publication of this volume will be a public benefit. It was prepared by the Illinois State Board of Health for the fifth annual report of the Board, and has been revised, corrected, and extended for this separate issue.

It contains the laws regulating the practice of medicine in the various States; a list of medical institutions in this country, both those extinct and yet existing; a list of medical colleges, with their course of instruction, fees, number of students, percentage of graduates to matriculants, etc.; auxiliary and post-graduate schools; special lists of colleges for women only, for both sexes, and for colored students; a list of institutions, extinct and existing, which are not recognized by the Illinois Board of Health, as not coming up to the requirements demanded; and other matters.

The reader will easily see that a work of this kind, authoritatively issued, cannot but have a widely beneficial influence.

Illustrations of the Influence of the Mind upon the Body in Health and Disease. By Daniel Hack Tuke, M. D., LL. D., etc. Second American Edition. Philadelphia: H. C. Lea's Son & Co. 1 vol. 8vo., pp. 482.

The growing intelligent interest in the study of psychical phenomena from the point of view of the physiologist, will insure for this revised edition of Dr. Tuke's excellent volume a great many readers. While he does not expressly deny that there are many phenomena which may call for other explanations, he justly claims that whatever can be explained by physiology, should not be placed in any other category.

With regard to this second edition, we do not find much in it not in the first. There are some diagrams added, and moderate notice is taken of several recent publications, but not so much as we had hoped. Those, however, who are not familiar with Dr. Tuke's entertaining pages, will do well

to possess themselves of a copy, and they will find it a real treat.

Eczema and its Management. By L. Duncan Bulkley, A. M., M. D. Second edition. 8vo., pp. 334. G. P. Putnam's Sons. Price, \$3.00.

The reception given to the first edition of this monograph was gratifying to the author, and in the preparation of this second issue he has closely revised his text, and aimed to render it constantly more serviceable to the general practitioner. The frequency of eczema, and its usual ready response to appropriate medication, are reasons which may be offered for the prompt sale of a monograph upon it. The author himself speaks from a study of three thousand cases of it, and of course his experience cannot but be improving to read.

We do not advocate the omission of references to other workers in the same field, all of whom are substantially ignored by Dr. Bulkley. His defense of this omission, as given in the preface, is unsatisfactory; and the result to the reader is disappointing, or else deceptive. "Personal experience," on which he harps, is very good; but, as Bacon says, no sound surgeon is made by it alone; and an author is not justified in ignoring the sources of his learning, and in omitting to credit that which he borrows from antecedent workers.

History of the Discovery of the Circulation of the Blood. By Henry C. Chapman, M. D., etc. Philadelphia: P. Blakiston, Son & Co. 8vo., pp. 56. Price, \$1.00.

This is a lecture, somewhat enlarged, and to be a chapter in a general work by the author. He reviews the subject carefully, and reaches the following chronological arrangement of the epochs of the discovery of the circulation:

1. Discovery of the structure and functions of the valves of the heart. Erasistratus, B. C., 304.
2. The arteries carry blood during life, not air. Galen, A. D., 165.
3. The Pulmonary Circulation. Servetus, 1553.
4. The Systemic Circulation. Cæsalpinus, 1593.
5. The Pulmonic and Systemic Circulation. Harvey, 1628.
6. The Capillaries. Malpighi, 1661.

To this division of the honors of this great discovery the careful historian will no doubt assent. As Dr. Chapman says, it was not the product of one man, but of the gradual progress of scientific observation.

Seventh Annual Report of the Board of Health of the State of New Jersey. 1883. 8vo., pp. 391.

Many interesting vital statistics and much general information are contained in this report. Of the topics discussed, we may mention: the pre-

vention of smallpox, odor nuisances, diseases of operatives, healthy homes, modes of interment, health resorts, charitable and penal institutions, sewage of cities, school hygiene, local boards of health, adulterations of foods and drinks, milk inspection, climatology of the state, and the usual summaries of vital facts.

The Secretary of the Board is Dr. Ezra M. Hunt, of Trenton, N. J., who has done much to promote its efficiency, and who may be addressed for copies.

Transactions of the Medical Association of the State of Missouri for 1883. 8vo., pp. 262.

A well-made volume this, with a goodly array of original articles. Most of the subjects have a living interest, and are well handled. Of these we may mention a study by Dr. P. V. Schenck, of St. Louis, on the comparative mortality, insurability, and proclivity to disease in the two sexes. He gathers together a great many facts indicating the superior viability of the female, and suggests the explanation of this. Dr. J. M. Allen takes considerable pains with his essay, "Alcohol, its Effects upon the Human System;" but shall we never find a writer who can present fairly all sides of this question? Of the undoubted benefits of the substance in its sanitary and hygienic aspects, he says never a word; and if it promotes crime so much, why is there more crime in total abstinent nations than in those that drink? Some striking cases of vaginismus are recorded by Dr. Willis P. King. Dr. J. W. Traver, of Sedalia, advocates the elastic ligature in fistula, and claims good results from it. Dr. W. A. Hardaway reports the results of ten years' observation of electricity in skin diseases. He thinks electrolysis the best cauterant for the skin.

The Diseases of Children. A Hand-book for Practitioners and Students. By Armand Semple, B. A., M. B., 8vo., pp. 352. G. P. Putnam's Sons, N. Y. Price \$1.75.

The author here presents to us a compact and well-prepared manual on this branch of medicine, one which is so important to the general practitioner. He begins with a series of general considerations on the general appearance of infants, their temperament, development, dentition, and on the methods of their clinical examination. From this he proceeds to a discussion of the various diseases to which they are liable, observing necessarily a great deal of brevity, but condensing judiciously. Scarcely any disease is omitted, reasonably full accounts being given of hereditary syphilis, skin diseases, tumors, and scrofulosis. For the purpose intended, the volume is a satisfactory one.

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LOBELIA AND ITS DOSAGE.

Those of our readers whose medical memory can carry them back a quarter of a century or more, will easily recall the popularity in some sections of the "Thompsonian" medicines, especially "Number Nine" and "Number Two." Except in remote country localities, that "school" has passed away, and its professors have yielded to some other species of charlatans.

Their doctrines were of the simplest. All diseases came either from "heat" or from "cold," these words having some mysterious etiological significance never fully cleared up. The remedy for "cold" was red pepper, for "heat," lobelia inflata, and the amount of these substances poured into the patients was something wonderful.

Though, as we say, the race of Thompsonians seems about extinct in the United States, a number still exist in Great Britain. Our foreign journals contain a notice of a recent trial in London, where a herbalist was charged with manslaughter on the coroner's inquisition, the testimony showing that the patient had died half an hour after taking a tablespoonful of an acetic solution of lobelia prescribed by the defendant.

The defense was that lobelia is not poisonous, and such conflicting evidence from medical men and medical writers was offered that a verdict of "Not Guilty" was rendered. The jury could not do otherwise in the face of such a deposition as the following from a reputable physician of thirty years' standing:

During the whole of that time he had been in the daily habit of using and prescribing lobelia inflata. He had taken it himself in drachm doses. Emphatically it was not a poison. It was an invaluable medicine; there was nothing like it in the whole of the materia medica. To a very delicate child, and in a dangerous condition, he would give a teaspoonful of it in the syrup every three hours. Lobelia was a tonic, an expectorant, a sudorific, and a most valuable emetic. When the Poisons Bill was before the House of Commons, guinea-pigs were obtained from Covent Garden Market, and experiments were made with this so-called poison; but the guinea-pigs would not die from it—they grew fat instead. If lobelia did not act as an emetic, it would be perfectly harmless; it would pass through the body as a gentle aper-

ient; it would not have a depressant effect on the heart. However large the dose, lobelia could not be deleterious.

It is strange that a plant so familiar as this should have its properties so little ascertained. But so it is. Even Ringer, in his work on Therapeutics, attributes its neglect by the profession to the fact that they administer it in too small doses. He would give it much more freely.

Its only danger would seem to be its depressing effects on an abnormally weak heart. The nausea it causes is intense in certain persons, but not of danger or of long duration.

No doubt some of our readers have watched its effects on an extensive scale, and in full doses, and we should be glad to give publicity to their observations.

THE VIVISECTION LAW.

In reference to the facts in this case, referred to in our editorial, cur. vol., p.375, two letters have been sent us, from which we make the following extracts :

From Dr. S. WEIR MITCHELL :

"We, Dr. H. C. Wood and myself, met Mr. Jones, then a State Senator, at his office. He was inclined to favor their bill. We pointed out its absurdities, and said we were willing to accept a bill to restrict, such as was about to be considered by the English Commons, but that it must end all further efforts to abolish vivisection. Mr. J. did not think our proposition would be accepted, or any one which did not mean a step towards total abolition. Next day he told us that the ladies would not entertain our offer. Mr. Jones does not to-day recall what passed."

From the second letter, written by Dr. H. C. Wood, we take the following :

"We [Dr. Mitchell and myself] offered to agree upon a rational bill, similar to that then before the British House of Commons. Mr. Jones, after consultation with the women representing the society, refused to accept any bill not prohibitive in scope, or any modification of the bill then before the Legislature.

"We then, of necessity, used our influence to defeat said bill."

As the source of our information as given in the editorial was directly from the ladies them-

selves, it is quite clear that their representative, Senator Jones, did not apprehend their intentions and wishes correctly, and unwittingly placed them in a position which they did not desire to occupy.

THE SALUBRITY OF WASHINGTON CITY.

Consumption in the Eastern States is like fever and ague out West; every locality acknowledges some cases, but claims that it is much worse in some neighboring district.

The last city which has felt it incumbent upon itself to clear its sanitary reputation is Washington. Our capital, in fact, has always been an apt disciple in that process known in political circles as "whitewashing." A few years ago it was accused of being malarious. Its health officers immediately rushed to the rescue, and demonstrated that all this talk about malaria is nonsense. Then somebody wickedly said that Washington is a hot place in summer. At once, a list of thermometrical readings were published to prove that it is quite a cool spot at that season—favorable, indeed, as a pleasant place of refuge in the dog-days.

Now, some other unbeliever has accused it of showing a very high mortality for phthisis. So far as the bare assertion goes, it is hard to get around it. Here are the official figures, on the authority of Surgeon-General Hamilton :

DEATHS FROM CONSUMPTION IN SEVERAL CITIES.

	Census 1880. Popul'n	Deaths	Year	Average.
District and Washington	177,624	804	1882	1 death in 221
Baltimore	332,313	1,272	"	1 " " 261
Boston	362,839	1,564	"	1 " " 232
Cincinnati	255,780	698	1881	" " 366
Philadelphia	847,170	2,692	1880	" " 314
New Orleans	216,000	900	1881	" " 240
Richmond	63,600	247	1882	" " 257
San Francisco	233,959	690	1881	" " 339

This would seem conclusive. Not at all. The physicians and health officers of Washington are fully acquainted with the celebrated saying of an English economist, "Nothing is so deceptive as figures, unless it be facts!"

They have been making great efforts to show that these numerous deaths are in truth attributable to Washington's famously salubrious climate

—that its reputation as a health resort attracts the consumptives from other localities, and (this is, to be sure, a little awkward) they come and die there!

Another physician puts the mortality on the black race. The white folks, according to an "old and experienced" doctor, have an extraordinary exemption from lung diseases in Washington, where the colored population suffer from it in an equally extraordinary degree.

One of the "oldest" practitioners asserts that the climate there is so healthy that no disease prevails, and as to consumption, if it is common in either race, he has yet to learn it.

It would be rather amusing to read such defences, were it not at the same time a little sad to see how professional men let their opinions be influenced by their prejudices.

NOTES AND COMMENTS.

Sequelæ of Diphtheria.

The sequelæ of diphtheria, as we know, are oftentimes more serious than the disease itself, and Dr. Alfred Carpenter endeavors to explain their occurrence (*Brit. Med. Jour.*, March 1, 1884,) by the following ingenious theory:

"But how will this explain the sequelæ which frequently follow upon diphtheritic mischief? I mentioned the fact that potato-rot is known to be propagated by the agency of resting spores. These are spores or germs which are shut up in a very resistant envelope, which enables them to retain their vitality in adverse circumstances; so that heat, if it be not much above 212° , and the cold even of zero, will fail to destroy it. These spores may, by analogy, be fairly assumed to exist. The ordinary spores are evacuated from the system as the patient recovers; but the resting spores remain in contact with the lining membrane of the blood-vessels, or are carried by the blood-current into some of those parts of the body which usually act as filters, and retain matters which are foreign to the blood-current. Perhaps they attach themselves to lining membranes, such as the valves of the heart. They may there, as they develop, set up ulcerative endocarditis; and being detached from the valves as they increase in size, they irritate the membrane; and, being carried on by the blood-current, they produce emboli at

the spot to which they are carried. There they multiply, sooner or later, and the sequences of the disease appear as if they were separate and independent diseases, and as such are often registered among the causes of death as totally independent of the preceding diphtheritic condition."

Of treatment, he says:

"That treatment has been the use of ammonia as the proper stimulant, so as to reduce the acidity of the blood; for I have generally found these cases in constitutions which are either rheumatic with the lactic acid diathesis, or gouty from the excess of lithic acid in the constitution. I have generally given alkalis, as lithia, or potass. in combination with it; and when there has been an elevated temperature, which has indicated excessive chemical action in the invaded part, I have given the sulpho-carbolate of soda, with the greatest possible benefit. This salt reduces temperature, most likely by its antiparasitic power; for, as soon as a few doses have been given, the fever subsides, and the patient is much relieved; but, if the medicine be left off too soon, there is certain to be a relapse. This is very disappointing, and, if the practitioner be disheartened, and try another remedy, his patient will probably die. But if he return to his sulpho-carbolate, he will ultimately destroy all the developing resting spores in the tissues of his patient, and lead him on to a perfect recovery. It is curious how, in these cases, organ after organ becomes involved in the disease; it is also curious, but highly satisfactory, that the congestions or embolisms follow one another in point of time, otherwise there would be very little chance for the patient to recover. I would urge the practitioner to continue the sulpho-carbolate, in small doses, first with the ammonia, and, after a time, with quinine, avoiding altogether the mineral acids, as such appear to allow a more rapid development of the resting spores and a further relapse.

"As regards the local treatment of diphtheria, I have been accustomed to treat it on scientific principles, and attack the disease just as my gardener attacks the *oidium* upon grapes, and other parasitic disease upon vegetables generally. I apply the powder of washed sulphur to the throat very frequently, blowing it into the fauces, and applying it by means of a brush with a little glycerine or honey, alternating the application with a little sulphurous acid in solution. It is not a painful application; it destroys the mycelium and the ordinary spores which produce the disease. If this be done quickly, so that the growths do not penetrate to the deeper tissues, no

resting spores will find admission to the body, and there will be no following sequelæ. I have also been accustomed to advise that creasote be kept in the room, so that the air may be placed in that condition which diminishes, if it do not destroy, the growth and development of hyphomycetous fungi."

The Antipyretic Treatment of Typhoid Fever.

There are very few instances in medicine where, with quite a satisfactory knowledge concerning the diseased processes in question, our therapeutics are so varied as in the case of typhoid fever. Dr. William Cayley publishes a paper in advocacy of the antipyretic treatment in the *Brit. Med. Jour.*, March 1, 1884:

"Dr. C. stated the principal conclusions which the advocates of the antipyretic treatment of typhoid fever believed to be established on sufficient evidence. First, they maintained that this mode of treatment fulfilled the physiological indications; that, by keeping down the temperature, the febrile metabolism of the tissues, and the accumulation in the blood of the products of this metabolism—and to this Dr. Murchison attributed most of the symptoms of the typhoid state—were much diminished. The granular infiltration and softening of the central nervous system, of the heart, of the liver, of the kidneys, of the voluntary muscles, was to a great extent prevented; and, by the stimulating effect of the treatment on the vaso-motor system, that want of tone and general relaxation of the arteries which was so marked a feature of the disease was counteracted. Many of the opponents of the treatment admitted these conclusions, though, by so doing, they gave up more than half the field of battle. It was not, of course, necessary to assume that the high temperature was the only or even the chief injurious agent in typhoid fever. It was enough to say that it was an important factor, which could not be denied; and it was one which it lay in our power to counteract.

"Secondly. They maintained that, where the treatment was efficiently applied, it produced a marked alleviation of the symptoms. And this, too, was acknowledged by many of the opponents, though by so doing they gave up the greater part of the remainder of the ground. Where the temperature was kept steadily down, the so-called typhoid symptoms were seldom seen. The persistent headache, the febrile oppressions, the sleeplessness, the muttering delirium, the stupor, the dry, glazed tongue, the muscular twitchings, the bed-sores, were either prevented or alleviated;

and, to quote the words of Dr. Austin Flint, who was here endorsing a statement of Liebermeister, the old picture of the typhoid case was no longer to be seen, and the disease had lost half its terrors. Dr. Austin Flint, it was hardly necessary to say, was no enthusiast blinded by his eagerness for this method.

"Thirdly. It was maintained that, by this method of treatment, the complications of typhoid fever were neither rendered more frequent nor more severe. With regard to the pulmonary complications, the hypostatic congestion and pneumonia, there could not be a doubt but that they were rendered much less frequent. With regard to the intestinal complications, hemorrhage and perforation, Dr. Brandt asserted that, when the treatment was applied from the very first, they, too, were much diminished, and it was only reasonable to suppose that, as the tissues were less degenerated and softened, they would be more capable of resisting the sloughing and ulcerating processes. But, when the treatment was deferred till after the lapse of the first few days, it did not appear to exercise much influence, but there was no evidence that these complications were rendered more frequent.

"Lastly. It was maintained, and on evidence that could not, he thought, be overthrown, that by this method the rate of mortality was greatly diminished; so that, when arguments were brought against it, on theoretical grounds, by those who had never tried it, or on practical grounds by those who had only given it an imperfect trial, we might simply reply, with Professor Jaccoud, 'Nevertheless, while the rate of mortality in typhoid fever under the old method of treatment is about 19 per cent., under the antipyretic mode it is under 11 per cent.'"

The Therapeutics of the Lochia in Puerperal Affections.

Writing on this subject in the *Jour. des Sci. Med. de Lille*, Dr. Eustache says that these procedures consist of:

1. Avoiding the retention and stoppage of the flow in the uterus, or vagina, or at the vulva.
2. Modifying, by topical applications of liquids, the state of these surfaces, if they are injured.
3. Also modifying secondarily, by the same means, the offensive qualities of the discharge.

From this it is evident that these means should be employed whenever there is any lesion of the genital passages, especially in metritis; and they should be employed as often as possible before the morbid process has invaded the deeper parts, the

tubes, ovaries, and peritoneum. To fulfill these indications, the means are:

1. *Ergot*, which, given in small doses, two or three times a day, prevents the retention of the lochia.

2. *Intra-vaginal injections*, for which he preferably uses a solution of carbolic acid (1 to 100). The irrigations are made morning and evening, one or two being used until the liquid returns clear.

3. *Intra-uterine injections*, which should only be used when there are symptoms of metritis. For these Dr. Eustache uses the carbolic solution (1 to 100), at 86° to 89° Fah., and an irrigator holding a quart, to the tube of which he fastens a rubber tube, or an ordinary double-current tube. The tube is carried into the uterus to the depth of two or three inches. The irrigation should occupy from five to ten minutes.

Kreochyle.

Kreochyle is a new preparation of meat, made at the suggestion of Prof. Barff, and intended as a dietetic remedy in cases of acute disease, vomiting of pregnancy, aggravated dyspepsia, infantile diarrhoea, and similar conditions. The following analysis has been made by Dr. North, lecturer on physiology at the Westminster Hospital:

	Grammes per litre.
Soluble albumen,	35.125
Potash,	14.19
Phosphoric acid,	2.016
Nitrogen, in the form of kreatin, kreatinin, etc.,	2.4998
Chlorides,	6.186

The residue of meat, after having been used for the preparation of kreochyle, consists of

	Per cent.
Soluble albumen,	nil.
Phosphoric acid,	.704
Potash,	.181

Together with all the fat, fibrin and gelatin.

The *Birmingham Medical Review* concludes that kreochyle, therefore, is superior to beef tea, as it contains not only the extracts but a large amount of albumen. It is pleasant to the taste, and has proved valuable in the hands of many practitioners.

Acetonæmia and Diabetic Coma.

In the *Progrès Médical* (Nos. 50-51, 1883), MM. Cornillon and Mallat argue on the strength of one closely observed case against the theory that the comatose state in diabetes is due to the presence of acetone in the blood. Commenting on this statement, the *London Med. Times*, January 19, 1884, says:

With their opening assertion, that coma is a rare termination of diabetes, we fancy that physicians in this country will not be disposed to agree, for it is generally regarded as the most common termination of diabetes in young subjects. Less objection certainly can be taken to their conclusion, that acetonæmia cannot be considered as the direct and absolute cause of diabetic coma; this accords well with the opinions expressed when the subject was under discussion at the Pathological Society not long since. The authors further conclude, also, that the reddish-brown tint imparted to the urine by the perchloride of iron, and the rose tint by sulphuric acid, may be obtained in cases of long standing diabetes quite apart from any coma. These reactions bear no direct ratio to the amount of sugar present in the urine, and they are not usually found in fat diabetic patients; distillation or an intense and prolonged exposure to heat prevent these reactions; cold has not the same effect. In healthy persons, as well as the subjects of diabetes, perchloride of iron produces in contact with the saliva a reddish-brown color.

Post-Epileptic Automatism.

The phenomena oftentimes observed in connection with the epileptic state are most remarkable, and to a considerable degree is the following case, reported by Dr. T. Clifford Allbutt, in the *Brit. Med. Jour.*:

"A young gentleman who is now under my care for epilepsy of the ordinary type, went with two ladies the other day to make an afternoon call. After sitting awhile, he rose from his chair, and one of his friends said to the other. *sotto voce*, 'Oh, — is in a fit.' This she knew by his face. To her surprise, he went to the tea-table, helped himself to tea, and then walked—full cup in hand—to a chair in another part of the room. When seated again, he recovered consciousness. My patient assures me he was utterly unaware of his act or acts, and was very much startled to find himself transferred in no time, as it were, from one seat to another distant one. It was rather by chance the matter was named to me, and the circumstances were too trivial to encourage exaggeration. The story is, doubtless, quite true, and proves once more the possibility of a series of purposive acts in epileptic states."

Complicated Pregnancy.

In view of the fact that such cases are liable to occur to any one at any time, the following, which

Dr. W. F. O'Grady reports in the *Brit. Med. Jour.* for February 23, 1884, possesses interest:

A woman was admitted, about six years ago, into the Manchester Workhouse Hospital, New Bridge street, who stated that about three weeks before, being at the time three months pregnant, she fell downstairs, and soon afterwards noticed that her belly grew very full. She grew larger daily, and made a fair amount of water; but, when doing so, had to push the enlargement to one side. On examination, there was a pear-shaped tumor reaching to the umbilicus, tense, fluctuant, and dull on percussion. On passing a catheter, 100 ounces of water were drawn off. The gravid uterus was found to be retroverted; this was reduced, and the woman kept prone for a week. I delivered her of a fully-developed healthy child some months afterwards. The medical man under whose care she had been for a fortnight, sent her in as a case of tumor of womb or ovaries, requiring tapping.

Poisoning by Red Precipitate.

Dr. E. Kennedy thus writes to the *Brit. Med. Jour.*, January 12, 1884:

In the text-books accessible to me, there are but two instances cited of poisoning by red precipitate, and scarcely anything stated as to treatment. It would appear, then, that this agent is rarely chosen by the suicide or homicide; hence, it may be worth while to place on record a case recently occurring in my practice. A woman of middle age swallowed twopennyworth (about two drachms) of red precipitate. On my arrival she was vomiting, salt and water having been administered by her husband. I administered an emetic of sulphate of zinc; afterwards raw eggs, magnesia in milk; the diet to consist of egg in milk, bread and milk, etc. The symptoms complained of were, epigastric pain of a burning character, and an indefinite feeling of pain diffused over the abdomen. The next day there was hæmatemesis, and passage of florid blood *per anum*. After this the discomfort gradually subsided, and in five days the patient was convalescent.

Lead Poisoning.

One would hardly expect to find the origin of lead poisoning inside of the kitchen boiler, but so it was in a case that is reported in one of our foreign exchanges. Repeated and careful examinations failed to reveal any cause for the evident symptoms of lead poisoning from which the family were suffering. Finally, upon examining the kitchen boiler, a quantity of red lead was found

therein. A new tap had some few months before been put in the boiler, and one of the workmen had carelessly thrown in a large lump of red lead, which was left over when they had finished the job, in order to get rid of it. Here, then, was the source of the trouble; and since it has been removed the family have recovered their usual health. The boiler had not been used for some time after the tap was put in, and when it was, the servant was warned not to use the water from it for cooking purposes. This order she appears to have obeyed only so far as her own food was concerned, hence her immunity from sickness.

Rupture of Aorta During Labor.

This case, which Heinricius reports in the *Archives de Tocologie*, January, 1884, is supposed to be without a parallel in medical literature. A woman aged 38, for the third time pregnant, and in whom the uterine contractions were energetic, was suddenly seized with a convulsion, became comatose, and died. The forceps were applied, and the child delivered. The autopsy showed that the pericardium was distended with a large quantity of blood. The heart was fatty, and strongly contracted. A little above the sigmoid valves was found a rupture of the aorta, involving the internal and middle coats. The aortic coat was very thin at the seat of rupture, and there was a small spot of atheroma on the ascending portion of the vessel. Heinricius thinks that the rupture was due to the increased blood-pressure caused by the energetic contractions of the uterus and the abdominal walls.

Another Argument for Vaccination.

Dr. Walter Buchanan thus writes to one of our English exchanges:

If nothing else could convince us as to the value of vaccination, I think the following facts would be sufficient:

In July last, I was called to see Mrs. B., who was suffering from small-pox. Her husband and three children were unvaccinated; the father and two eldest were vaccinated by me when the eruption on the mother was in the papular stage: the youngest being very delicate, and the parents being opposed to vaccination, I deemed it advisable not to operate on the child. The results were as follows:

1. The mother made a good recovery.
2. The unvaccinated child died from small-pox on the fourth day of the eruption.
3. Those who were vaccinated escaped from infection entirely.

Chestnut Leaves in Whooping-cough.

Dr. J. Coopreider, of Taylorsville, Ind., writes to the *Canada Med. Record* that he has used the fluid extract of chestnut leaves for whooping-cough, with great success. He says:

The dose employed is from fifteen to sixty drops, according to age. If the child is large enough, I give it in hot water as an infusion, sweetened; to a small child, in simple syrup or elixir.

It not only relieves or lightens the paroxysms, but will actually cure in from four to five days.

I give four to six doses per day, according to the severity of the case.

If good fresh leaves can be procured, I make the infusion as a tea, say two drachms of the leaves to half a pint of boiling water, and give two ounces at a dose, sweetened with white sugar.

Jaborandi in Bright's Disease.

Both reason and experience do most clearly indicate the beneficial influence of jaborandi in Bright's disease. We are, therefore, pleased to note in the *Med. Record*, March 22, 1884, a communication from Dr. F. A. O'Brien, of Atlanta, Ga., in which he calls attention to the beneficial action of jaborandi, given in small or moderate doses, for a long time, in the various forms of albuminuria classed under the head of Bright's disease. He has found that the drug is better borne when combined with nux vomica than if exhibited alone. In his opinion the action of jaborandi is not to be explained solely from its sialogogue and diaphoretic effects. He believes that it has a specific influence on the kidneys, permitting the tubules to relieve themselves of the inflammatory products that block up their lumina.

An Insecticide for Fruit Trees.

From the *Chemist and Druggist* we learn that Mr. R. McClachlan, F. R. S., reporting on an insect attacking the orange-trees in British Guiana, says:

"The most effective of all insecticides is termed 'kerosene emulsion,' the formula for the preparation of which is here given:

Pure kerosene,	1 gallon.
Condensed milk,	1½ pints.
Water,	3 pints.

Mix the milk and the water before adding the oil, and churn until the whole solidifies and forms a 'butter.' In applying this preparation, the kerosene 'butter' should be diluted with from twelve to sixteen times its quantity of water, and then

be applied immediately; for if it is allowed to stand, the 'butter' rises to the surface, and the solution is imperfect. The insects can be more readily combated by insecticides during the very short period in which they are active, just after emergence from the egg."

Kerosene Poisoning.

In the *Druggist's Circular and Chem. Gaz.*, February, 1884, Dr. C. S. Wheeler, of Williamsburg, Mass., reports the history of a case of kerosene poisoning, which is instructive, as these accidents are rare. He says: "I was called October 29th to see a child, eighteen months old, who had swallowed an unknown quantity of kerosene, though the amount did not probably exceed two ounces. The little patient, seen one hour subsequently to the swallowing, was vomiting, purging, cyanotic; a tendency to coma existed, the pulse was 130, weak, and somewhat irregular; respiration was also irregular. Treatment: ordinary emetics were given before my arrival, hence only stimulants and alkalies were ordered. After a few days of gastro-enteric febrile movement, the child recovered. I have heard of several ounces of kerosene having been taken by adults without perceptible results, but the above case compels me to doubt the statement."

Congenital Femoral Hernia.

Dr. Sabourin has recorded, in the *Progrès Médical* (January 26), the case of a female child, born at seven months, and small but well developed, in whom the mother, a few days after birth, noticed a swelling in the right inguinal region. Six weeks later, when Dr. Sabourin was called in, the tumor had attained the size of a filbert; it was situated in the upper part of the right thigh, below Poupart's ligament, and on the inner side of the femoral artery. It disappeared on pressure with a distinct gurgling sensation, and reappeared when the child cried. After reduction, the borders of an opening in the fascia could be felt. The hernia was cured in less than three months by the pressure of a small pad.

Liebig's Infants' Soup.

According to Meffdorsky (*Pharm. Zeitsch. J. Russ.*), quoted in the *Rundschau*, this food can be thus prepared: Take 480 parts of freshly-ground wheat flour, not the finest; 480 parts of ground malt; 15 parts of bicarbonate soda; mix with 960 parts of water, and 4,800 of milk. Stir well

over a gentle fire till the mixture begins to thicken. Then remove the mixture and stir well for five minutes. Heat again, and when it next begins to thicken, raise the heat till the mixture just begins to boil. Then pass through a fine strainer, so that the husks may be removed. The food is sweet enough without additional sugar. It will keep for 24 hours.

Tincture of Cantharides for Suppression of Urine.

This drug is not usually recommended in such cases, but in the *Boston Med. and Surg. Jour.*, March 22, 1884, Dr. W. C. B. Fifield reports a case, which he had seen in consultation with Dr. Rogers, of Dorchester. The patient was a hard drinker, whose symptoms were at first obscure, but who had later had albuminuria with casts. Complete suppression had lasted some days. Active treatment had been of no avail, and the patient was comatose and failing. Tincture of cantharides was then given hourly in drop doses, and after some hours the secretion was reëstablished, and the patient recovered so far as to be out.

Artificial Coumarin.

From the *Pharmaceutical Journal* we learn that coumarin is the odoriferous principle of the tonka bean, woodruff, sweet-smelling grass, and other plants, which owe their aroma and value exclusively to the coumarin they contain, the other principles being not only valueless, but disadvantageous. Coumarin has now been made artificially: one method of preparation is by warming sodium salicylaldehyde ($\text{NaC}_7\text{H}_5\text{O}_2$) with an anhydrous acid, or by boiling salicylaldehyde with sodium acetate and anhydrous acid. Recent improvements in the process have greatly shortened the time and expense.

Dislocation Forwards of the Four Inner Metacarpal Bones.

As a valuable contribution to surgery, it is of interest to note that this rare accident is described by Habillon, of Nancy, in his graduation thesis. He has collected thirteen cases, all men, and resulting either from direct violence or from extreme flexion or extension of the wrist. In his own case, the dislocation was caused by the passing of a wheel over the hand, and there was a wound on the dorsal aspect of the wrist. The reduction is easy, but difficult to maintain, and a certain degree of subluxation and stiffness is generally left.

CORRESPONDENCE.

A Plea for Venesection.

EDS. MED. AND SURG. REPORTER :—

Apropos to the remarks on the subject of blood-letting by Dr. Hiram Corson, I send you the following report of a case which, to me, seemed to present some interesting features:

About 3 p. m. on November 26, 1883, I was summoned hastily to see Mr. T. M., aged about sixty-five, whom I found presenting the following symptoms: Clonic convulsions, very severe, and occurring on an average about one per minute. Face very much flushed—nearly livid. There were some spasmodic efforts to reject the contents of the stomach. Breathing stertorous. The family informed me that about half an hour before, he had been sitting in a chair, and suddenly commenced to jerk his head backwards and over one shoulder, and in a moment or two fell to the floor in convulsions. I observed that the left arm and leg did not participate in the convulsive movements. I immediately diagnosed "apoplexy," and with difficulty, on account of the violent nature of the convulsions, got his coat off and his sleeve up, with a view to blood-letting. The blood did not start readily—a few drops only at first; after a little it came more freely, and I finally, by tapping a vein in each arm, succeeded in getting about a *quart*. There was no marked change in his condition, unless, perchance, the lividity of the face might have been slightly lessened.

At this point, my friend Dr. Hurlbut arrived. We consulted hastily as to the best means of averting death, which seemed imminent. The pulse, which was strong and full at the first and about 110 per minute, seemed possibly a trifle softer. We resolved to bleed until there was some marked impression made upon the convulsions. Both arms were ligated and new veins opened. The blood ran very slowly, while we watched the symptoms. We let the blood run until two *pint tins* had been filled, making an aggregate of over two *quarts*. The convulsions had now nearly ceased, the face had become pale, and the breathing less stertorous. There were still some twitchings of the muscles of the face and some spasmodic actions, confined to the right arm and leg, the left side being as from the first apparently paralyzed. I went to my office, a few rods only, for a hypodermic syringe, intending to inject a small quantity of morphia to quiet this muscular twitching; but when I returned a few moments afterwards, the spasmodic action had entirely ceased, and the morphia was not used. About three hours later we saw our patient, and found that there were some signs of returning consciousness. At this point there was an interesting feature of the case which we are unable to account for, viz., the paralysis, which had been so well marked on the *left* side had been transferred to the *right* side, and the *left* side he now seemed to move with ease. The convulsions did not return. He passed a reasonably good night. In the morning consciousness had so nearly returned that he was able to answer questions put to him, though not always rationally. The paralysis had entirely

disappeared save as regards the tongue, which seemed a trifle thick. From this time on he made a good recovery, and has been apparently in better health than before the attack. The particularly marked feature about this case was the unusually large quantity of blood taken. In our opinion no less amount of blood taken, and no other kind of treatment, would have saved him. The measured quantity of blood was not the only amount of blood lost, for a considerable quantity was lost in our endeavors to hold the arms over the receptacles for the blood, the spasmodic actions greatly hindering our efforts. Now, the question arises, Is there any limit to the amount of blood which should be taken in such cases? Our patient was of plethoric habit, and could therefore endure a greater loss than some. We think the rule should be: Bleed until you get the desired effect. Query: Why did the paralysis alternate from one side to the other? and could the patient have been saved by any treatment less heroic?

WALTER H. PARCELS, M. D.

Lewistown, Pa.

Running for Trains.

EDS. MED. AND SURG. REPORTER:—

In your last issue was a short article as a caution against the very pernicious practice of running to catch trains. Had I read and heeded this advice, something over a year ago, I perhaps should not be so ready to see the importance of riveting this knowledge of caution on the minds of physicians, and through them to the public and business men of our country. But my personal experience on this subject leads me to see that no one subject demands more attention than this; and perhaps no advice a physician could give would be more kindly received, or be better heeded, than advice on the subject we are interested in, viz., running for trains. And if the advice of physicians be, lose a train, or a dozen of them, rather than put future health or present life in jeopardy, and if this advice be well heeded, it no doubt would save many a valuable life among our great ones. My own experience in running to catch trains is this: Something over one year ago I was called to see a patient several miles from home, and consequently took the train. Only having a short time to visit my patient in, and walk about eighty rods from the depot, I made as good time as possible to get where my patient was; but owing to circumstances connected with the patient, I could not get started for the depot until almost the time that the train was due at the depot. I had only just started from the house, when I saw the train coming. Had I used a little judgment I should not have made the attempt to get to the train. But I thought I might make it, so I started on a fast run, which I kept up to the depot, and just as I reached the depot the train departed, and I, being too much exhausted to make any extra effort to reach the train, was left behind to feel ashamed that I had shown so little judgment, and worse than all, to find that I could not breathe naturally for the rest of that day. I could with difficulty get sufficient air to keep up the demand to sustain life; following this was a constant pain near or in the region of the heart, with a remitting pulse. After three or four months the pulse

regained its regular beat, but a feeble, weak pulse remains with me; also, a dull, heavy pain, which is made worse by anything which excites the circulation. Stimulants I do not use, so cannot say how they would affect me—not even tea or coffee.

I have consulted some good physicians; have tried blistering and tincture of iodine to surface over the heart, but all the effect I see from this was to excite a few small-sized carbuncles; so am now wearing a good, strong irritating plaster over the cardiac region, on the scapular side. This, apparently, is doing good, as it relieves the pain, and is, in my mind, indirectly giving strength to the feeble action of the heart. Nux vomica was recommended by one. This not only seemed to do no good, but I thought actually made the pulse more intermittent, and increased the pain; so I stopped its use and commenced taking small doses of quinine, iron, and strychnia. This appeared to regulate the pulse, after which I stopped its use. Have not taken anything now for eight or ten months; am doing well with my plaster, and all the rest I can get. J. D. APPELEY, M. D.

Blodgett Mills, N. Y., March 16, 1884.

Chronic Nasal Hemorrhage.

EDS. MED. AND SURG. REPORTER:

Please oblige the writer by requesting those of your readers whose experience may enable them to speak, through the department of "Queries and Replies," in the REPORTER, with regard to the best curative treatment for *chronic nasal hemorrhage*. We refer to the case of a boy (white), now about ten years of age, who, we learn from his mother, has been subject to frequent spells of bleeding from the nose, every few days since early infancy. Sometimes the bleeding is very profuse and exhausting; at other times it is slight, merely issuing drop by drop.

The patient has only been under our notice during the past year; and we have never seen him with a serious hemorrhage, and hence have never been compelled to resort to any active measures for his relief. Neither have we been able to make any thorough examination of the interior nares, because, at the time of our visits, the bleeding surface was covered with clotted blood, and the discharge almost arrested by the local use of such astringents as alum water, and more especially by a strong solution of ammonio-ferric alum—introduced by means of pledgets of cotton. The tincture of the chloride of iron has also been freely used, internally, as an astringent tonic. The attacks are not often so violent as to cause alarm, but the trouble is in a constant tendency to the return of the bleeding; and it reappears without any known exciting cause. It frequently occurs during sleep. Its return is often foreshadowed by *headache*. It is extremely rare for him to pass two weeks without some bleeding; and it sometimes continues slightly two or three days in succession. The boy always presents an *anemic* appearance, but has a good appetite, and is otherwise healthy. He goes to school, but frequently has to go home during the day, on account of the bleeding. And he also joins in the amusements and plays of other children of his age.

The first question we ask is, "What means can be adopted to bring about a radical cure of this

hemorrhagic diathesis?" The second is, "Would not some evil results, in all probability, follow such a cure?" Finally, "What is the best course to be pursued in this case?"

We have never examined the condition of the nasal membrane, for want of an opportunity, as before stated. The boy has, habitually, a "nasal tone" in conversation, and the bleeding is invariably from the right nostril.

We would be pleased to have information from any who have had experience with a similar case.

W. S. F., of Md.

March 10, 1884.

Eczema Scrofulosa.

EDS. MED. AND SURG. REPORTER:—

J. H. A. K., æt. 50, came into the Pittsburgh Infirmary for treatment February 27, 1884, suffering with eczema scrofulosa. He had been a sufferer with this disease since the middle of September, 1883. The dermis on the front and internal surface of the right thigh was quite denuded of its epidermis, red, and unbearably itchy; on the left thigh there were vesicles, and the parts very red and itchy. The disease affected the genital organs and anus, and in fact extended all over the body. The patient's father died of cancer at the age of 53 years. Paternal and maternal grandparents lived till between the ages of 60 and 70 years. There was no history of disease in them of a specific character. The subject of this paper suffered with periostitis and osteitis when he was 14 years old, and lost the fibula and os calcis of the left leg and foot from these diseases. The left elbow-joint was also affected, and now there is ankylosis of it. At the present time there is a fistulous opening leading to the posterior part of the femur, just above the knee-joint, through which necrosed bone can be felt. The patient has been treated by several physicians since last September for eczema, without any relief. Drs. M. D. Jones and A. Lange saw the case with me when he first came into the hospital. At this date he is almost recovered from eczema.

Treatment, internally, 15 grains of iodide of potassium three times a day, after eating, generous diet, hot bran bath once a day, and unguent of the oxide of zinc smeared over the affected parts three or four times a day.

I believe, with a great majority of physicians of the present day, that scrofula, cancer, and in many cases phthisis pulmonalis, have their origin in syphilis, and require the same constitutional treatment, and that the subject of this paper is a victim to transmitted syphilis.

J. M. BATTEN, M. D.

Pittsburgh, March 15, 1884.

Heredity.

EDS. MED. AND SURG. REPORTER:—

In your remarks on Heredity, page 179, vol. I, No. 6, you "lean" to the proposition that all diseases resulting in change of form or function may be transmitted. If accidentally acquired change of form may not also be transmitted, how will you account for the following cases?

In 1857 Mrs. W. died of phthisis, leaving three

daughters and one son. Her genital region was very badly scarred from a burn received before puberty, and she stated that after recovery she underwent an operation for occlusion of the vagina. The oldest daughter had but one child, a boy. The second daughter had but one child, a girl, which had congenital closure of the vagina. The third daughter has, so far, had but three children—the two boys being all right, but the girl required an operation for congenital occlusion of the vagina. I have lost track of the boy, but hope soon to get on his trail, and keep it till he also raises a family.

F. R. MILLARD, M. D.

San Diego, Cal.

NEWS AND MISCELLANY.

Correction.

In No. 9, p. 263, cur. vol., a rather ridiculous error occurred by the accidental omission of the word "apparently" before "still-born child." One or two friends have called attention to it, so we make this note.

Jefferson Medical College.

The fifty-ninth annual commencement of the Jefferson Medical College was held in the Academy of Music on Saturday, March 29, 1884. The degree of M. D. was conferred upon two hundred and fifteen students, and the following prizes were awarded:

1. \$100, by Henry C. Lea's Son & Co., for the best thesis, to John A. Buffington, of Maryland; with honorable mention of the theses of W. H. Vallette, of Ohio, and S. B. Horning, of Pennsylvania.

2. Gold medal, by R. J. Levis, M. D., for the best report of his surgical clinics at the Pennsylvania Hospital, to Thomas C. Hood, of Indiana.

3. Gold medal, by Thomas G. Morton, M. D., for the best report of his surgical clinics at the Pennsylvania Hospital, to Frederick Hertel, of Delaware; with honorable mention of the reports of Andrew B. Kirkpatrick, of Philadelphia, and Thomas Roby, of Missouri.

4. Gold medal, for the best essay on the subject pertaining to the practice of medicine, to James H. Bell, of Texas; with honorable mention of the thesis of B. W. MacNichol, of New York.

5. Gold medal, for the best original research in the chemical laboratory, to Sidney A. Stokes, of Pennsylvania; with honorable mention of the essay of Irving R. Schoonmaker, of Pennsylvania.

6. Case of instruments, for the best original research in the materia medica laboratory, to J. Edwin Sprenkle, of Philadelphia.

7. Case of instruments, for the best essay on a subject pertaining to physiology, to David A. Kappes, of Ohio; with honorable mention of the essay of William F. Kuhn, of Ohio.

8. Case of instruments for the best essay on a subject pertaining to surgery, to William A. Vaughan, of Virginia; with honorable mention of the thesis of A. J. Comstock, Jr., of California.

9. Gold medal for an essay on a subject pertaining to obstetrics, to Levi Huber, of Pennsyl-

vania, and another of equal value to L. M. Nason, of Maine; with honorable mention of the essays of John W. Felty, Justus Sinexson, and Evan O. Kane, of Pennsylvania.

10. Gold medal, for the best essay on a pathological subject, to William H. Fenner, of Pennsylvania; with honorable mention of the essays of Edward F. Wagner and John M. Fisher, of Pennsylvania.

The valedictory address was delivered by John H. Brinton, M. D., Professor of the Practice of Surgery and Clinical Surgery. In pointing out to the newly-made doctors the pathway to professional success, Dr. Brinton said that if they expected to become rich men, they would in all probability be disappointed. Few medical men, by the practice of their profession, ever amassed wealth; but they could always, by diligence and devotion to it, attain a decent competency. With this, and with the daily healthful exertion necessary to ensure it; came, he thought, as great a degree of happiness as any man can reasonably hope for. A successful physician must have a sound medical knowledge; but although nominally the graduates ceased to be students, in reality their student life had but begun. He advised them to keep note of their cases, so that in turn they could be able to contribute something to the general stock of medical learning. They should not, however, rush carelessly into print, but write because they have something to say, not because they wished to say something. They should always seek to preserve their individuality, and not be carried away by theory nor by plausible or fallacious reasoning. Dr. Brinton advised the graduates when they had gotten fairly to work, to join a good medical society, which would prevent them from becoming rusty; to keep up an interest in their calling, and take care of their business; to work steadily and work in a right manner and a proper spirit, and with honesty and a conscientious purpose. The physician should be a gentleman, not only in outward demeanor, but in very heart, and should most carefully refrain from impressions of ill-will towards his brethren, or adverse criticisms of their actions. Dr. Brinton impressed upon his hearers the great duty they owed the science of medicine in the solution of the problem of many diseases which still baffle medical treatment, such as consumption, diphtheria, the wave of pestilence, wide-spreading cholera, and fevers, deadly as were the plagues of Egypt, and those poisons of the blood, cancer, scrofula, and all their kin. In concluding, Dr. Brinton said:

"The history of the past often points with prophetic finger, to the future. One man, great Jenner, barred the spread of small-pox, and other maladies may yet be checked by men whose names will then be blessed not less than his. When the times are ripe these men are born. I need not wander far to find a scarce-closed grave of such a one; one of your predecessors, a child of our own Alma Mater, who by his life and teachings, and by the unspeakable benefits he has conferred upon suffering womankind, deserves unquestionably to be regarded as one of the great benefactors of his race. Well may the profession throughout this land join hands to raise a monumental tablet commemorative of the loveliness of the character,

the goodness of the works, and the undying fame, of Marion Sims."

Pasteur's Laboratory.

M. Pasteur's son-in-law has written a work descriptive of the great man's scientific life, entitled "*L' Histoire d' un Savant par un Ignorant*," from which we quote the following:

"All the animals in the laboratory, from the little white mice hiding under a bundle of cotton wool to the dogs barking furiously from behind their iron-railed kennels, are doomed to death. These inhabitants of the laboratory, which are marched out day after day in order to be subjected to operations or other experiments, share the space with still more ghastly objects. From all parts of France hampers arrive containing fowls which have died of cholera or some other disease. Here is an enormous basket bound with straw; it contains the body of a pig which has died of fever. A fragment of lung, forwarded in a tin box, is from a cow dying of pneumonia. Other goods are still more precious. Since M. Pasteur, two years ago, went to Pauillac to await the arrival of a boat which brought yellow fever patients, he receives now and then from far-off countries a bottle of *vomito negro*. Tubes filled with blood are lying about, and small plates containing drops of blood may be seen everywhere on the work-tables. In special stores bottle-like bladders are ranged resembling small liquor bottles. The prick of a pin into one of these bladders would bring death to any man. Inclosed in glass prisons millions and millions of microbes live and multiply."

The Scavenging of Paris.

Hitherto the system of scavenging in Paris has been imperfectly carried out. The refuse matter of each house used to be deposited in the street after 10 o'clock at night, where it lay till the next morning, when it was carted off by scavengers. This was found to be a great nuisance; and a new order from the Prefecture of Police has just been published, altering this state of things. The refuse matter is to be deposited in receptacles for the purpose early in the morning only, and is to be immediately removed by the municipal scavengers. Any infringement of this regulation by the proprietors or porters of houses, who will be held responsible, will be severely punished. But this new arrangement does not meet with the satisfaction of the "*chiffonniers*," who have petitioned the Prefect of Police to allow matters to remain as before, as the new regulations would be simply ruinous to them. The fact is, rag-gathering would appear to be not an altogether unprofitable calling, as cases are related where some of these people have actually died in comparative wealth. Not long ago a "*chiffonnier*," at his death, was found to possess \$20,000, and yet he lived in the most abject misery.

Jefferson Medical College Alumni.

The Alumni Association of Jefferson Medical College held their fourteenth annual meeting at the college, March 28, and elected the following officers:

President.—Professor S. D. Gross.

Vice Presidents.—Drs. A. Hewson, Ellwood Wilson, R. J. Levis, Roberts Bartholow.

Treasurer.—Dr. Nathan Hatfield.

Secretaries.—Drs. T. H. Andrews and R. J. Dunglison.

The deaths of Dr. J. Marion Sims, an alumnus of the college, and Dr. R. T. Coleman, an honorary Vice President of the Association, were appropriately referred to in the report of the Executive Committee, and a continuance of the social meetings of the graduates was recommended. Dr. Theophilus Parvin, the new Professor of Obstetrics in the College, was elected an honorary member of the Association; and Dr. J. W. Holland, of the University of Louisville, Ky., was chosen to give the address next year.

The Treatment of Syphilis.

Bichromate of potass as an antisymphilitic has for partisan in Saxony Dr. Güntz, and in France Prof. Vulpian. The former employs it in solution charged with carbonic gas, as follows :

R. Bichromate of potass,	$\frac{2}{3}$ gr.
Nitrate of potass,	2 gr.
Nitrate of soda,	2 gr.
Chloride of sodium,	4 gr.
Water charged with gas,	$\frac{3}{8}$ xx.

M. Vulpian also recommends it in dyspepsia depending on a catarrhal affection of the stomach simulating carcinoma of that organ. He prefers it in the form of pills :

R. Bichromate of potass,	1 gr.
Extract of valerian,	10 gr.

Divide into 5 pills. One, two, or three in the day.

It will be remembered that it was Prof. Vulpian who attended the late Count de Chambord, and having recognized that disease as catarrh of the stomach, prescribed these pills, but, it must be added, with little result.

Legality of Cremation.

It has been decided by the English courts that cremation is a legal method of disposing of corpses. The Cremation Society, however, have prudently adopted the following rules :

1. An application in writing must be made by the friends or executors of the deceased—unless it has been made by the deceased person himself during life—stating that it was the wish of the deceased to be cremated after death.

2. A certificate must be sent in by one qualified medical man at least, who attended the deceased until the time of death, unhesitatingly stating that the cause of death was natural, and what that cause was.

3. If no medical man attended during the illness, an autopsy must be made by a medical officer appointed by the Society, or no cremation can take place.

Fascination.

From the *Brit. Med. Jour.*, we learn that M. Brémond has made, on sailors, soldiers, and officers, from fourteen to twenty-six years of age, a large number of experiments showing that lethargy, catalepsy, and somnambulism, can be pro-

duced in healthy non-hysterical people, and that these phenomena are preceded by a peculiar state of fascination. The period of fascination is characterized by a sudden increase in the frequency of the pulse. One-third of the young men experimented upon manifested one or more of the above-mentioned symptoms.

Delusions and Executive Ability.

The *Birmingham Medical Review* reports that one of the members of the Executive Council of the Bank of Brussels was many years ago attacked by the delusion that his legs were glass, and positively refused to move. A financial crisis came, involving the bank to some extent. Mr. B. got up and went to Brussels, where, by his energy and skill, he largely assisted in getting matters straight. At the end of the month he returned home, remarked how marvelous it was that he had not smashed even one of his legs, and, taking to bed, never again left it.

The Origin of the Hymen.

Dr. Pozzi, of Paris, in a recent paper defended the opinion that this membrane depends from the vulva and not the vagina, as was the opinion of Budin. Further, he considered that that portion of the genital organs commonly called the bulb of the vagina as the analogy of the urethral bulb in man, was nothing more than a rich plexus of vessels.

The Mortality Caused by One German Hog.

In a dispatch from Berlin, dated March 27, 1884, it is officially stated that last year at Ermsleben, a small town of Prussian-Saxony, 403 persons were seriously ill and 66 died from trichinosis. The disease was caused by eating raw pork, which all came from one and the same hog.

Items.

—It is stated that the foot-ball eleven of a prominent college started on its late contest with eight substitutes and a surgeon.

—The Indiana State medical Society meeting has been postponed until after the meeting of the American Medical Association.

—A bill has been introduced into the House of Commons providing for the restriction of the sale of patented medicines until they have been officially analyzed and pronounced not poisonous.

—The New York Assembly has passed a bill limiting the time of service of conductors and drivers on city railways to twelve hours a day. In Philadelphia these men work from sixteen to eighteen hours a day.

—The fifth International Congress of Hygiene will meet at the Hague, August 21 to 27, 1884. The papers to be read will consider individual and general hygiene, sanitary police, demography, and medical statistics.

—The twenty-third annual commencement of Bellevue Medical College, New York, was held in Steinway Hall on Thursday evening, March 13. The degree of M. D. was conferred upon one hundred and forty-nine graduates.

—Another coroner's verdict. It was rendered at Pekin, Ill., on the body of a man found in the river, and declared "that the late deceased had come to his death by a blow on the head inflicted either before or after he was drowned."

—James Russell Lowell writes to a friend in Boston that he likes living in London "all but the living." He is becoming dyspeptic, and attributes it to his entire and enforced abstinence from fresh and salt cod, clams, buckwheat cakes, and baked beans, which are actual necessities almost wholly unknown in Great Britain.

—The new buildings of the Medical Department, University of Vermont, erected by John P. Howard, at a cost of \$30,000, was dedicated March 6. The building was presented to the University in behalf of Mr. Howard by Henry Ballard, and was accepted in an address by President Buckingham. The medical class numbers 200 students.

—The Maryland House Committee on Ways and Means has reported favorably Mr. Lane's High License bill, which has already passed the Senate. For selling liquor in quantities not less than a pint, the prices of license range from \$50 on \$1,000 worth of stock, to over \$300 on \$30,000 in stock; for selling quantities less than a pint, from \$150 to \$500, according to population.

—The question of the regeneration of divided nerves in man after suture has been the subject of fresh discussion at recent meetings of the Société de Chirurgie (*L'Union Médicale*, December 4). Mr. Pick has recorded a case of suture of the radial nerve six months after its complete division, with the result of functional restoration after a period of twelve months from the operation.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

Please give me the result of your experience in the use of plaster of Paris dressing in the treatment of club-foot. If you have found it satisfactory, will you be kind enough to write me, giving minutely your method of application? That is to say, after the tendons have been divided, do you apply the plaster at once, as in the case of fracture; and, if so, how long would you allow it to remain before removing it? how frequently would it be necessary, say in an infant less than one year old, to change the dressing? and how long, generally, should the child wear the plaster dressing before it would be safe to dispense with it? Can the cure be brought about with the plaster dressing alone, or would it be better, after a time, to apply the ordinary club-foot apparatus? I am told that the practice of treatment by the use of plaster of Paris is becoming quite prevalent, and as I am so thoroughly "behind the light-house" on this subject, I ask for information. Any paper which you may have at hand, relating to the case in point, will be thankfully received.

Mansfield, O.

W. H. R.

A Formula for Salicylic Acid.

EDS. MED. AND SURG. REP.—

Will you please give me, through your journal, a formula for the administration of *acid salicylic* which will effect a *thorough solution of the acid*, and at the same time in no sense detract from its medicinal qualities? Does the exhibition of alkalies used by druggists to effect this solution destroy the action of the salicylic as an acid, or injure its chemical or medicinal qualities in any sense? E. S. B.

D. M. P., of Pa.—Labarraque's solution is the *liquor sodæ chlorinate*.

Dr. B., of Pa.—We have been unable to learn of any observations connecting the presence or the absence of the uvula with fertility.

Dr. V. O., of Ky.—The statement that persons in the Arctic regions are little subject to lung disease is an error. Dr. H. Hink states that in Greenland thirty-five per cent. of the deaths are from pulmonary affections.

Dr. A. K., of Md.—The mineral waters of the United States have never been thoroughly examined. We believe that there are many springs here equal to the best in Europe.

MARRIAGES.

BARNES—PENN.—At the residence of Rev. Bristow, No. 15 West Ninth street, Covington, Ky., Dr. T. S. Barnes, of Pike county, and Miss Mollie Penn, of Clermont county, Ohio.

FRENCH—WOOD.—At the residence of her relatives, Mr. and Mrs. Gayle, Newport, Ky., March 5, 1884, by the Rev. S. L. Loomis, Dr. M. R. French, of Cincinnati, and Miss Sarah B. Wood. No cards.

LEMEN—CHICK.—At the residence of the bride's parents, 3214 Morgan street, St. Louis, March 12, 1884, Dr. J. R. Lemen and Miss Ida May Chick.

MURPHY—THOMAS.—In Parkesburgh, Pa., March 13, 1884, by the Rev. James A. Marshall, Walter A. Murphy, M. D., and Sallie K. Thomas.

REEDER—WELLS.—At Spring Lake, Ohio, February 20, 1884, by Rev. H. H. Wells, D. D., the bride's brother, Charles W. Reeder, M. D., of Wickliffe, O., and Emma C. Wells, of Willoughby, O.

ROGERS—CHALMERS.—At the residence of the bride's father, General J. R. Chalmers, near Sardis, Miss., February 21, 1884, Dr. W. B. Rogers, of Memphis, and Miss Kate H. Chalmers.

WORMLEY—MADSEN.—In this city, February 17, 1884, by the Rev. Dr. H. C. McCook, Dr. William Wormley, of Lancaster, Pa., and Emilie Madsen, of Philadelphia.

DEATHS.

DU BOSE.—At Sunflower Landing, Tenn., February 20, 1884, of pneumonia, Dr. W. J. Du Bose.

DU BOSE.—At Sunflower Landing, Tenn., March 6, 1884, Myrtice M. Du Bose, wife of the late Dr. W. J. Du Bose.

ELWYN.—In this city, March 15, 1884, Alfred Langdon Elwyn, M. D., in the eightieth year of his age.

FISHER.—In St. Louis, March 10, 1884, Dr. Gustavus Fisher, aged seventy-two years.

HURDSFIELD.—At his late residence, 261 West Thirty, eighth street, New York city, Monday, March 3, 1884, John Hursfield, M. D., in the fortieth year of his age.

KEITH.—At Jacksonville, Florida, Thursday, March 13, 1884, Dr. Bethuel Keith, formerly of this city and Stamford, Conn.

MCDONNELL.—At his late residence, 148 East Forty-fourth street, New York city, Saturday, March 8, 1884, after a lingering illness, Dr. P. W. McDonnell, Police Surgeon.

MERCER.—In Jeffersonville, Ind., February 28, 1884, of paralysis, Dr. Thos. C. Mercer, a native of Louisville, Ky., aged sixty-four years.

WILLARD.—In Haddonfield, N. J., March 10, 1884, Roland Willard, M. D., in the ninetieth year of his age.

WOOD.—At his late residence, in Flushing, N. Y., March 7, 1884, Stephen Wood, M. D., aged seventy-three years.

MORRIS.—In this city, March 17, 1884, Caspar Morris, M. D., in the seventy-ninth year of his age.

PULTE.—In Cincinnati, Ohio, Sunday, February 24, 1884, at 4 a. m., of general debility, Dr. Joseph H. Pulte, in the seventy-third year of his age.

STILLMAN.—In Troy, N. Y., March 21, 1884, Dr. A. G. Stillman. He was a pupil of President Arthur in the District School at Pownall, Vt.

DOUGLASS.—March 13, 1884, Dr. J. H. Douglass, aged seventy-five years.

THE MEDICAL AND SURGICAL REPORTER.

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[Vol. L.—No. 15.]

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

MILK SICKNESS.

BY THE LATE DR. FULTON.

Read before the Logan County (Ohio) Medical Society.

Notwithstanding the great diversity of opinion in reference to the *cause* of this peculiar disease—no vegetable or mineral having yet been unmistakably identified as the guilty agent—yet all agree, with united voice, that it is a specific poison, producing a disease *per se*. And the agreement is as unanimous that it is *endemic*. And, although there are frequently cases of the poisoning, and even deaths, far from these localities, which the physicians, where they occur, do not understand, or know what to call, or how to treat; yet the poison was obtained in those localities, and transferred to its place of destination in meat, butter, or cheese, and there received into the system and produced its results.

But as to whether the specific virus is of vegetable or mineral origin, there is no agreement—each having about an equal number of adherents; and each, generally, being founded in his belief, either from preconceived opinion of his own, or the accidental opinion of the neighbors, positively and perseveringly asserted, without his taking the trouble to inquire into and investigate all the ascertainable facts connected with the case.

The vegetable theorists, whether in favor of white snake-root, lobelia, poison-oak, or what not, do not claim, excepting some of the most reckless observers and asserters, that they have seen the disease produced, in either man or beast, by the administration, or voluntary use, of their favorite

article. That there have been instances of poisoning by all these articles, and also by the buckeye, and other vegetables, there is no doubt; and that, too, with many of the symptoms of milk sickness, but, that the *tout ensemble* of symptoms necessarily and invariably accompanying it, and which, taken together, unmistakably characterize the disease, is caused by them, is by the mineral theorists, positively denied.

On the other hand, neither do the mineralists claim that they have, or can produce, the disease by administering any of the minerals that they hold to be the guilty agents. But they do claim, that they have many satisfactory instances of cattle, and persons also, taking it from water, whatever article that water may have been impregnated with. As, for instance, the case given by Dr. White, in the *Transylvania Journal of Medicine*, January, 1836: "A respectable farmer informed me that his cattle had been in the habit of frequenting a pasture ground in company with his neighbor's, on the opposite side of the creek from him. In returning home, his cattle were obliged to cross the creek. For many years not a case of the disease appeared among them, while his neighbor lost some forty or fifty during that time. The animals of the latter did not cross the creek, but drank at another stream. Both herds ranged the same woods and fed on the same herbage. It is presumable, therefore, that the disorder was produced by the water; and, in confirmation of this opinion, this individual further stated to me that, suspecting a spring at which his cattle drank to be the origin of the evil, he set to work felling trees around it, so as to exclude his stock from it, and that afterward they suf-

fered no more with the disease for several years. At length, however, it recurred again, and on examination, it was found that the spring had become accessible from the decay of the timber. The inclosure being repaired, and the cattle shut out from the water, the disease a second time disappeared."

And many similar instances could be cited, some two or three of which have fallen under my own observation. One in Richland township, Logan county, O., where the cattle had been taking the disease from the first settlement of the country, and several persons on that and adjoining farms had taken it, and most of them had died, until a spring was finally suspected and enclosed—since which time to the present, some fifteen years, there has been no more of it.

Another, that of a low, marshy piece of ground in Brunswick township, of the same county, the country around which was notorious for the number of cattle that died of the disease, and of persons that took it, until, with the improved agriculture of the country, that place, with other low lands, was ditched and drained; since which time there has been no more of the disease in that neighborhood in either man or beast.

Another instance, that of a stock-well on a farm in Clark county, as I am informed by several credible witnesses, from which the cattle were accustomed to be watered, and had been taking the disease for a number of years, when it was suspected and closed, since which there has been no more of it.

Again, there is a farm in Hardin county, on which members of every family that has ever lived there have had the disease. On that farm I have attended patients who said that they had not used meat, milk, butter, or cheese for weeks, guarding against the disease. The presumption therefore was that they, and also those of the previous families that had lived there, had obtained it directly from the water.

And thus I might enumerate many more similar instances upon which the mineral theorists found their belief, without naming any article, either elementary or compound, believing it to be a thing yet to be discovered.

These facts militate equally against the zymotic or malarial theory.

Inception: Invasion.—The *stadium prodromorum*, or period intervening between the first impression of the morbid cause or the reception of the virus, and the actual outbreak of the more violent phenomena of the disease, varies greatly in length, from one day to weeks, or even months, depending

upon the amount of poison received, the susceptibility of the person receiving it, the toxic property of the virus, and habits or occupation of the recipient. If the person is of sedentary habits, not engaged in any occupation that requires much muscular activity to excite the heart or heat the system, he may receive and have a large amount of the poison lie dormant in his system for a long time without any visible signs of its presence. But let him labor hard, or take any violent exercise, till he heats himself, and the pathognomonic phenomena of the disease will immediately show themselves with terrific violence, the most notable of which are, overwhelming sickness of the stomach, with violent vomiting, and obstinate constipation of the bowels.

Every physician, or other person conversant with the disease, is perfectly familiar with the fact that the poison may lie dormant in the system in sufficient quantity, when the proper condition presents, to explode with terrific violence, without showing any signs of its presence till it is, so to speak, ignited by active exercise, or heating of the person. For instance, where persons, as is frequently the case, receive the poison in a poison district, and afterwards go into a neighborhood where the disease has never been known to have been, and upon being heated by hard labor, are taken down with the disease, the physician is called a fool, and perhaps turned off, for naming it "Milk Sickness;" "for," say they, "we don't have that disease here." Or, as is more frequently the case where cattle are bought in a poison district, *apparently* all right and healthy, but upon being run in driving them home, immediately take the "trembles," and, perhaps, are never gotten home, or, as is very generally the case, where the sucking calf takes the disease, while the mother, in whose system the poison was, shows no signs of the disease. Or, again, as in the case recorded by Dr. F. H. Sale, of Indiana: "A young calf took the 'trembles' and died. The cow was milked and the milk fed to two pigs that were in a pen. The pigs thrived and fattened, and in due time were slaughtered. The first meal that the man and his wife (owners of the pigs) took made them sick, and they both died in four days after eating the pork, with all the symptoms of Milk Sickness. *Neither cow nor pigs showed any signs of the disease.*"

Symptoms.—The group of invariable accompanying symptoms, which, in common language, constitutes the disease, do not, in the main, differ from those of the febrile diseases. But there are

some that are truly *diagnostic*, and so marked that there need not be any danger of mistaking it for any other disease.

The general symptoms are: derangement of the nervous system, producing mental and muscular languor; general *malaise*, and uncomfortable sensations, confusion and weakness of the intellectual powers, tremors of the extremities, changed expression of the countenance, and nausea. And, in the active state, the most terrible sickness, described by those who have experienced both, as more heart-depressing, hopeless, and unendurable than that of sea-sickness. This sickness is partially relieved for a few minutes after vomiting. The vomiting recurs so frequently, so violently, and so unmitigatedly, that it is well nigh an impossibility to have medicine retained long enough to take effect. After continuing for a length of time, if not prevented by the use of alkalies, the dejections assume the coffee-ground appearance, like the *vomito*, or black vomit of yellow fever.

Another symptom of the disease most prominent to the eye of the common observer, is the state of perfect inactivity of the bowels, or obstinate constipation, which, if counteracted and continued to be counteracted, the disease is cured. This, as will be shown hereafter, we believe to be the cause of the vomiting, and symptomatic of the true pathological condition of the organism.

There is a peculiar *smell* connected with the disease, which is considered by most observers as pathognomonic. Dr. Dawson, of Green county, Ohio, in giving the prominent symptoms of the disease, says: "As a premonitory symptom, a peculiar and indescribable *fetor* from the lungs, is the most prominent; and so universally have I found it present, and to precede the disease, that in almost every instance where I have been brought in proximity to a person predisposed or attacked, I have been able to foretell its approach, and pronounce the character of the disease."

Dr. J. Newland Smith mentions a *peculiar odor of the breath* as a characteristic symptom of the disease.

Dr. B. S. Brown, of Bellefontaine, Ohio, says: "There is an odor, *per se*, attending the disease, as easily distinguishable as that of garlic." And this is the almost universal testimony of those acquainted with the disease, both professional and unprofessional.

The *great tolerance of cathartic medicines* is, also, a characteristic feature of the disease. Some other diseases and certain conditions will occasionally bear a great amount of cathartics. But

Milk Sickness invariably tolerates and requires, to one not acquainted with the disease, an almost incredible amount of cathartics. I have known patients to take and retain from fifty to seventy doses of physic in about twice that number of hours, each dose sufficiently large to purge a man under ordinary circumstances; and, also, during the same time, receive a great many large and active enemata, and yet not be very freely purged.

There is another peculiarity connected with the disease, which, to me, is diagnostic. I mean the *moan* of the patient. Yet I have not seen it named by any other person. To my ear it is a moan so peculiarly characteristic, that I think it as distinguishable as the cough of croup. There are other affections in which patients moan as much as they do in this. But there is a peculiar tone of woe-begoneness and despondency connected with the milk-sick moan, which gives feature or physiognomy to it, that is easily recognizable, after having once heard it. And yet I cannot describe it in words, so that one not acquainted with it would know it upon first sight. To be known it must be heard. I think that I can diagnose the disease upon hearing the moan, without seeing the patient.

The *decubitus* of the patient, especially after the case becomes bad, is peculiar—an indifferent stolidity of countenance, a drawing forward and down of the head and shoulders, so as to lie partially across the bed, with the head hanging over and the clothes drawn forward and up, so as to uncover the feet.

I will mention one other pathognomonic, or at least invariably accompanying symptom, viz: a *collapsed condition of the abdomen*. This is a necessary consequence of the pathological condition of the viscera, as will be shown further on. At least it is present in every genuine case of the disease, to a greater or less extent. In the majority of cases the caving in is so great, that the pulsation of the abdominal aorta can be seen or plainly felt, as low down as the pelvis. When the collapse is not so perfect, it will be found that it will take more cathartic medicine to relieve the patient, owing, perhaps, to the greater accumulation of fecal matter at the invasion of the disease.

I will recapitulate, that you may have a condensed or bird's-eye view of the symptoms peculiar to the disease: 1. Frequent, violent, and persistent vomiting; 2. Coffee-ground, or black vomit; 3. Obstinate constipation; 4. Peculiar odor of the breath; 5. Remarkable tolerance of cathartic medicine; 6. A peculiar woe-begone moan; 7. A collapsed abdomen. All which,

when taken together, constitute a physiognomy of disease, which is easily and unmistakably recognized after having once seen it.

Diagnosis.—The diagnosis of the disease, as I have before intimated, is not at all a difficult matter. Yet it is very difficult, if not impossible, to point out, in words, the precise difference between any one symptom in this and the same in any other disease. But, taken collectively in the same case, with their relative connections and bearings one upon another, and he must be poor in individualizing who cannot, without difficulty, recognize it. I have often been asked if I was *certain* that it was milk sickness—if it might not be something else. I have answered, that if it was *not* that, I did not know what it was. That I knew that it was not any other disease that I had ever seen or read of.

But, fortunately, the symptoms are so marked, and the indications to be fulfilled so plain, that, though one may be slow in *naming* the disease, yet he need not be at any loss in making a rational prescription.

Pathology.—And this leads me to speak of the pathology of the disease. The first morbid impression of the poison is undoubtedly upon the nervous system, as is manifested by the common premonitory symptoms, as enumerated above. But the special and specific action, as I believe, is upon the ganglionic system, the source of the organic functions, and of all animal life.

As the brain and its prolongations—the cord and nerves—are the fountain and viaducts of mentality and sensation, so are the ganglia and their ramifications the seat and avenues of life and procreation, controlling the secretions, nutrition, circulation, and the involuntary motions. If, therefore, the solar plexus and its system of ganglia should become oppressed or paralyzed by a specific poison, or by any other means, the symptoms we would expect *a priori* would be very similar to those of Milk Sickness. The involuntary peristaltic action of the intestines would cease, and constipation would be the necessary consequence, especially after the lacteals and lymphatics had taken up their liquid contents. And it would be *persistent* until that action would, partially at least, be restored. And that is just the milk-sick condition.

Again, the vital stimulus that causes the peristaltic motion being removed, the intestinal muscles in that respect would be paralyzed, and the spinal nerves, still having their function unimpaired, would cause them to contract and close the calibre of the bowel. And that contraction

and closure would continue so long as the ganglionic stimulus was withheld. And here again is the precise milk-sick condition. In autopsies made by myself, on animals killed for that purpose, that had the disease, I found the small intestines contracted so close that they appeared like a large lumbricus their whole length. And I suppose that the large ones would have been in the same state, but that they were impacted with dry feces, so that they could not contract.

I find that this corresponds very nearly with a report of the examination of a body, dead from Milk Sickness, made by Dr. J. V. Wagman, of New Castle, Indiana. He says: "The brain and its membranes exhibited nothing remarkable; the kidneys, bladder, heart, and lungs were sound; the duodenum, as well as the lower part of the stomach, was *much contracted*; the cæcum was dry; and the colon, containing hardened feces, on which it contracted closely, was drier than other portions of the tube," etc.

This being the state of affairs, the bowels contracted into the least possible bounds, the consequence would be a collapse of the abdominal parietes, spoken of before as a distinguishing feature of the disease.

The action of the bowels being thus stopped, we would also expect that the stomach would take a *reversed* action, as in ileus, intussusception, strangulated hernia, etc., nature's effort to relieve these conditions. And this, also, we find to be prominently true in Milk Sickness. So that, from a partial paralysis of the organ of life, we would expect *all* the symptoms that this disease presents, just as from *complete* paralysis, we would expect death.

My theory, therefore, of the pathology of the disease, is that it consists primarily in a depression of the powers of the *ganglionic system of nerves*, and secondly, or *immediately*, in a *tonic spasm*, and continuous spastic condition of the *intestinal muscles*.

This theory is *confirmed*, not only by autopsies, but also by the fact that those means which will relax that spasm, and continue the relaxation, are the best remedies for the disease; such as the warm bath, or bleeding, etc., to syncope, where there is sufficient vital stamina remaining, and then keeping up the relaxation by cathartics, *et cætera*.

Treatment.—The treatment consists in sedatives, relaxants, cathartics, enemata, etc., judiciously and perseveringly applied. Each practitioner will have his preferences in making his selection of articles from these different classes of

medicines. Some may be more fortunate than others in their choice. I have my preferences. And I may say that in a thirty years' practice among it, I have been so fortunate as not to have lost a single case of my own attending.

I said above, that the means must be *perseveringly* applied. If one dose is rejected, another must be given, and that "not until seven times only, but until seventy times seven."

A CASE OF SCIRRHUS OF THE PANCREAS SIMULATING ABDOMINAL ANEURISM.

BY M. W. LILLY, M. D.,

Of Grand View, Iowa.

(Concluded from page 423.)

November 26. The tumor was about 6 by 2½ to 3½ inches. It appeared to be the abdominal aorta, or something exactly over it and attached to it. Its pulsations were so strong they could even be seen at a distance of a yard or more by lightly placing the hands on each side of it. By palpation it could be felt to expand laterally as well as in front. It could not be emptied by pressure. The pulsations as strong when patient was prone as when lying supine. On December 8th, the systolic shock and murmur were both distinctly marked, but no diastolic shock. The tumor seemed smaller than on the 26th ult. During the last week of November and first week of December, she had three quite severe attacks of dyspnoea, lasting from one to three hours, and a lighter fourth one.

December 7, evening. Found her in great pain, and nothing remaining on her stomach since yesterday morning. Blistered again; gave Jamaica dogwood and ½ grain of morphia hypodermically. 8 a. m. Blister produced no effect; the dogwood, nor anything else, retained by the stomach. The morphia gave the most complete relief she had experienced in a long time; used same again. The hands, after having been nearly well for a week or more, have again become very red and spotted, but not painful as before.

18th. For the last ten days absolutely nothing has remained on her stomach—neither food, drink, nor medicine. Bowels moved twice themselves, and appeared quite natural in character. Urine red, but free, sometimes markedly so. Morphia, hypodermically, her only relief from pain and vomiting. The pain was indeed torturing, radiating from the epigastric region in all directions. It always precedes the vomiting, and undoubtedly is its cause and not effect. Neither can I think the vomiting caused by the morphia or anything she

attempts to take. On the 15th and 16th it required 1 to 1½ grain every 4 hours, and then only partial relief was obtained. For an hour or two after each hypodermic, she could endure the pain, talk, get a little sleep, and during these hours only. In three hours she begged for the hypoderm again. To-day it takes ¾ grain each six hours. During last twelve days have given per enema every six hours egg 3ss., lime water 3j., and milk and beef tea each, 3iss. Redness of hands all gone. The tumor is smaller.

21st. Since the 18th she can take a very little nourishment and hot water for drink. Has been raising a yellowish-green sputa quite freely. Now uses ½ to ¾ grain hypodermics, each six to eight hours. She is growing weaker fast, but stomach still so irritable and weak I cannot give more nourishment, or stimulants and tonics, even if certain they would do good. The tumor still smaller than on the 18th.

22d to 26th. Had to increase the dose of morphia again to ¾ and one grain. Vomited but little.

26th. She died quietly at 10 a. m., two hours after the last hypodermic. Rational nearly to the last.

Post-mortem, December 27, twenty-four hours after death.

The following members of our County Medical Society were present by invitation: Drs. Hall, Overholt, Grimes, Rogers, and Latta.

We found both lungs adherent to the diaphragm and pericardium. The pericardium thin and translucent; quantity of fluid normal. Muscular structure of the heart soft and flabby, and covered with a small amount of fat. Lungs also adherent to the pleura in front. All these adhesions were easily broken up with the fingers. The stomach, diaphragm, and omentum strongly adherent. Stomach normal in size, save that its walls were very much attenuated, except at the pylorus, where there was some thickening. The abdominal aorta was firmly bound down by strong adhesions, but normal in size and position. Between the stomach and aorta was the tumor, in size about ½ to ¾ inches thick, 1½ inches broad by 5 inches long, extending from the level of the ensiform cartilage downwards, and a little to the right and forwards. The upper or left end—somewhat the smaller—was firmly attached to the aorta. Externally, it was covered with fibrous bands which had attached themselves to the posterior surface of the stomach, to the aorta as before mentioned, also from its lower end as low as the left kidney, to which it was firmly attached, and to the omentum in front. Internally, it was

grayish-white, with small black specks through it, and in a few places yellowish white. It cut dense and crisp. In some portions, the fibrous bands appeared to have extended into and through it. That this tumor, notwithstanding its nearly vertical position, changed structure, and small size at the autopsy, was the pancreas, I have not a doubt. The right kidney was smaller than normal; left one larger and firmly adherent. Liver somewhat enlarged and very friable. A small amount of tubercular deposit in the lower lobe of left lung; remainder of lung healthy. Ovaries normal. Uterus slightly enlarged. The skin remarkably friable—in closing the incision it was remarked, "It sews like through butter"—although a large, dull sacking-needle was used.

Remarks.—This case differed from the typical only:

1. In the skin disease of the hands, due, I think, to chronic inflammation of the pylorus, where we found thickening. Troussseau, Rayer, Chomel, and Wilson Fox, speak of eczematous or impetiginous irruptions, slight attacks of conjunctivitis, and a vinous tint on the malar bone and nose as frequent accompaniments of chronic inflammation of the stomach, and that during days when they were the most marked, the symptoms referable to the stomach were perceptibly alleviated. Also Schmidtmann remarks: "*Novi mulierem in qua herpes faciei cum cardialgia alternabat; extante in facie herpete a cardialgia vacabat; eo disparente, exemplo duris torquebatur ventriculi doloribus.*"—"I know a woman in whom herpes of the face may be alternated with heart-burn (cardialgia), while vacant from the stomach it stands forth with herpes in the face; as it disappears little by little, the pain in the stomach may become severe torture." I see no reason why this vinous tint mentioned should not appear on the hands as well as on the malar bone. You will remember the alternatings of pain from hands to stomach, also the attacks of conjunctivitis.

2. There was no discharge of fats by the bowels, and no enlargement of the lymphatics.

3. The whole gland was involved, I think, by a primary scirrhus, and the post-mortem found it much atrophied.

In conclusion, I would mention the remark of this lady's son, Mr. Henry M. White, after the autopsy, at which he was present. Said he: "The doctors know now what mother died of, but have they learned anything as to the treatment of another case like hers?" Possibly Mr. W. voiced the thoughts of many relatives at post

mortems, and I was glad he thus expressed himself. We often have hard work to obtain post mortems, and is not here an added incentive to us to observe carefully and intelligently on these occasions, that we may have a clear and definite answer to give for the opinions we entertain and express. In other words, we must seek to make them of practical use to the laity and ourselves also. Some contend that "we know and can use only that which we can clearly express in language." I do not quite subscribe to this, but it certainly makes our knowledge more available and the better remembered.

In this case we learned two things: First, negatively, that without the pathognomonic sign of aneurism, do not call it one, and especially do not treat it by compression with the tourniquet; but having it, I think we ought.—Reynold's *Sys. Med.*, II., 868. Second. If a cure could have been effected, I think it was in the line of our efforts.

SOME REMARKS UPON "THERAPEUTIC ACTION AND KINDRED SUBJECTS."

BY JAMES W. YOUNG, M. D.,
Of Williamsport, Pa.,

Read before the Lycoming County Medical Society.

GENTLEMEN: The study of therapeutics is lifelong with the physician, and one worthy of his best efforts. In the presentation of my remarks upon this intricate but interesting subject, I trust I will make myself clearly understood. If I succeed in creating any new interest in this department of medicine, I will be well paid for these few lines.

A physician publishes a plan of treatment successful in his own practice, which, upon being tried by others, fails with many.

Why this happens, is a question of some interest to us. I confess my inability to give a clear solution of the difficulty. Experience has taught most of us that "hope kept alive" and faith on the part of the patient are valuable aids to the effectual action of medicines. That physicians are not equally expert in the use of these peculiar mental forces, is very clear. It matters not how much confidence our patients may place in us, their medical attendants; the instant they recognize the fact that we lack confidence either in ourselves or our remedies, the power of medicine for good is lessened, if not destroyed entirely. Of course I speak in a general way only, for it is well known that this statement will not apply to all drugs. A physician should have as thorough knowledge of the drugs he prescribes as the good

surgeon has of the instruments he uses, and the structures in which he works. It is better to use but a few medicines in the treatment of disease, and understand that few thoroughly, than to handle a multitude and know very little of any. It is admitted by all that many diseases differ in type and malignancy in different localities; and further, that they differ in the same vicinity in different years. Neither should it be forgotten that no two persons are exactly alike, either as a whole or a part—that vital force differs in the same person from time to time, and that it also differs in different persons; and finally, that the mode of death differs in different epidemics, and even in the same one. While this state of things exists, with no two cases alike, we can not expect at all times to get the therapeutic action of certain drugs to which our attention is called in medical literature. The form in which medicine is administered has much to do with therapeutic action. For the sake of convenience, we will divide medicine-takers into three classes, as follows:

1. Those who believe that disease can only be cured by a "strong medicine," or one which tastes disgustingly ugly.
2. Those who are fastidious or squeamish, and call for nothing but agreeable remedies.
3. Those who are satisfied with what we order. As the mind influences the body wonderfully in disease, the peculiarities of these different classes should be taken into consideration in prescribing. I do not wish the impression left, that any medicine should be given which is incompatible with the patient's safety. Tact upon the part of the physician has much to do with success in therapeutics.

Almost every one now-a-days is possessed of the idea that his system is below par, and demands medicines that will build him up. The physician who does not humor his patient in that idea, though he treat him to the very opposite, stands in the danger of either losing his case, or repelling faith and hope, those excellent persuaders of therapeutic action to which we have referred before. This is not all: our client may fall into the hands of a quack or practitioner of some exclusive system of medicine, and not only help fill the pocketbook of our adversary, but get well and sing praises to him and his system for many a day. Thus you see, gentlemen, that while we stand and wonder how it comes that our opponent is so successful, we scarcely ever think of the fact that faith, hope, and nature, cure many patients.

The antagonism of therapeutic agents is a subject which should receive our most earnest attention. Experiments upon animals and men in

health are numerous, and certainly of vast benefit to medical science. Still it must not be forgotten that but very little of it is reliable enough to guide us in the treatment of disease. A vast field remains open to thorough cultivation. The action of the same medicine upon the sick is, as a general rule, wonderfully different from its effects upon the healthy. Here we again encounter a huge obstacle in the investigation of remedies. However, let us not be discouraged, for our work is grand, and one productive of much good. It matters not to what department of the healing art you give the greater portion of your time. Let every man do what he can, for our many minds and talents run in different channels.

I would not have you overlook the influence medicines exert upon each other in combination (or following each other), notwithstanding the tendency of the age is toward the administration of simple or single agents. Our many combinations are growing more simple by lessening the number of ingredients. The medical practitioner who discards routine treatment, and looks with disfavor upon those of his professional brethren who treat disease according to some system of nomenclature, is delighted with the signs of the times. Still it cannot be denied that the efficacy of certain formulas is beyond dispute, and he who disbelieves this statement places himself at great disadvantage. Accurate *clinical* observation is the chief key-note of therapeutic action. It is the rock upon which all investigation must finally rest or be crushed. If we wish to make great advances in the science, we must discard complicated formulas as much as possible, and rely principally upon simple combinations, or what is still better, the drug mixed with some harmless, inert, and agreeable substance. I would like to make some remarks regarding the actions of particular drugs upon each other; but as I have nothing new to offer, nothing unfamiliar to you, I would simply call your attention to the literature of this subject. I would not have you form the opinion that I do not believe in drugs, and depend solely on nature, for then I certainly would have degenerated in my *materia medica*.

It is hard to believe that any living physician would allow intermittent and remittent fevers to run their way without medicine, or let syphilis and other poisonous diseases develop without medication, and be but a silent looker-on.

Our aid is invaluable to nature in the treatment of hundreds of maladies which without our assistance would terminate fatally. I would not practice medicine one day longer did I not feel

fully satisfied that many medicines prolong life by curing and preventing disease, by banishing pain, and aiding nature in a multitude of ways.

A CASE OF CONCEPTION WITHOUT INTRO-MISSION.

BY EDWARD CASS, M. D.,
Of Dresden, Ohio.

In the REPORTER for March 1, 1884, is an extract from the *Gazz. degli Ospital*, October 24, 1883, by Resconi, discussing the subject of conception. The author combats the old opinion that "spermatozoa can make their way into the uterine cavity, if they have already been abandoned only in the vagina. Pallen, Fraer, Rouget, and Kolbert, have all shown the falsity of such doctrine. Experiments on the dead body are then related, which seemed to put beyond a doubt, that semen can enter the uterus only at the time of coition." I have a case to relate that will put beyond a doubt, in practical minds, that conception *has* taken place where it was impossible for the semen to be thrown into the cavity of the uterus. More than a year ago I was called to see a lady in her accouchement, and on making digital examination, I found about two inches and a half within the vaginal canal a firm, unyielding band or curtain, entirely grown across the canal. On the pubic side of this curtain was a small orifice through which I could not introduce the end of my little finger. Through this small foramen must have drained the catamenia. It was her third confinement. Her testimony was this: Some time after the second child was born, she discovered this obstruction in the vaginal canal, and spoke of it to her husband before he had intercourse with her. She was delighted with the discovery, for she thought the obstruction would be an unfailing measure to prevent child-bearing. Some inflammatory action had taken place after confinement, and closed the canal as I found it. By force the band was ruptured, and the labor completed. It required considerable force to rupture the septum. Here, then, is an instance where it was impossible during sexual congress to inject the seminal fluid into the uterine cavity.

Here is a fact—a truth. Here is an accidentally discovered theorem that demonstrates the possibility that the uterus may be impregnated when the "spermatozoa have been abandoned only in the vagina." The American medical professors, in their docility to European speculative teachings, are peculiarly credulous. Since I have

made this narrated discovery, I have doubt that the seminal fluid is almost never thrown into the uterine cavity. This unyielding curtain had no power to dilate the small orifice that speculators claim for the mouth of the uterus. The corollary is plain, without a doubt, that spermatozoa were in this case abandoned quite a distance from the mouth of the uterus. It may be that Pallen, Fraer, and Kolbert, *et al.*, would take this case to be an exceptional one to the rule, that the spermatozoa in the Americans are possessed of greater energy to surmount difficulties than those of other countries—and take into consideration that this occurred in *Ohio, too*, where we find the most determined, enterprising, and aggressive of the race. If this could be copied into every European journal, it might be a cause for them to reflect, and revolutionize a little speculative theory.

HOSPITAL REPORTS.

A CLINICAL LECTURE AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

BY WILLIAM PEPPER, M. D., LL. D.,
Provost and Professor of Clinical Medicine in the University of Pennsylvania.

Obstruction of the Small Intestine—Exophthalmic Goitre.

(Concluded from page 427.)

Now as to the vomiting which has been present at one period of this case. It would seem that we should obtain some valuable information from this point. Stercoraceous vomiting is a rare phenomenon, except in connection with actual mechanical obstruction of the bowel, and it is most frequently found associated with mechanical obstruction of the ilium. The narrowing must be at such a position that the contents of the bowel have acquired a faecal character, and it cannot therefore be in the jejunum or very high in the ilium. The occurrence of vomiting of this nature would indicate that, as long as nineteen years ago, there was mechanical obstruction in the bowel.

A not improbable explanation of this case is, that in consequence of ulceration of the follicles of the intestine, occurring perhaps in a child in whom there was some natural narrowing of the bowels, there was produced a contraction of the intestine, giving rise to obstruction to the passage of hardened faeces, to immense distension of the abdomen, and to recurring attacks of stercoraceous vomiting, which continued for seven months; that with the development of the intestine, and possibly with some yielding of the stricture, the obstructed part was enlarged sufficiently to allow life to continue; and that as long as the faeces are liquid or very soft, they can get through, but that the obstruction is always sufficient to interfere with the passage of hardened faeces, and to retard

the passage of softened feces and allow the formation of immense quantities of gas.

From the facts that the appetite is still fair, that the digestion and assimilation are good, that there is no vomiting, no eructations, that the flatulence is intestinal, and the gas passed per anum, I conclude that the great prominence in the upper zone of the abdomen is due rather to great distension of the colon than to dilatation of the stomach. I mention these facts, reserving to myself the privilege of investigating the stomach by direct exploration before deciding positively as to this point.

Is there any other supposition than the one which I have stated which will explain this case? It is needless to say that if any tumor had been forming and gradually occluding the bowel, it would have brought the case to an end long before this. No impaction could have continued as long as this has done under such varying methods of treatment. Some of the curious forms of internal hernias in which the bowel slips into a rent in the mesentery are to be thought of. It is possible that the constriction is due to this cause. Still this is not as probable as narrowing of the intestine, for the symptoms have been so continuous, neither assuming greater severity nor yielding to any considerable degree. If the obstruction were the result of some form of internal hernia, we should expect that at intervals there would have been complete obstruction, and with stercoraceous vomiting. There has, however, only been an average degree of obstruction remaining persistently for eighteen years; and this is more consistent with a certain definite degree of narrowing of the bowel than with any other condition of which I can think.

This supposition makes the prognosis, as regards duration of life, much more favorable, and at the same time shows us that we should limit our efforts at treatment to dietetic management. I should like to try in this case the effect of absolutely liquid food, given in small quantities at frequent intervals. I shall order skim-milk or butter-milk in doses of four ounces every two hours, and gradually increase the amount to six or eight ounces every three hours. It may be that the milk will form too hard masses. If that should be the case, I shall order pepsin and dilute the milk with one-third of its bulk of lime-water, or a little thin oatmeal gruel may be added to break up the masses of casein. If this proves too constipating, I shall go farther and form a peptonized milk, a portion of which will be added to each quantity of milk taken, and he will also receive after each meal five grains of pepsin.

We shall continue this treatment sufficiently long to determine its effect on the immense distension.

Exophthalmic Goitre.

This patient, M. W., was born in Prussia, but came to this country when three years of age. She is now twenty-nine years old. Her mother and one sister died of phthisis. She states that her paternal grandmother had goitre. She was put to work when twelve years of age, and has had to work hard ever since. Soon after going to work, she began to suffer from attacks of palpitation of the heart. She has always been nervous, and worries greatly over trifles. Eleven years ago, the lower part of the left lobe of the thyroid

gland began to enlarge, and five years ago the right lobe began to increase in size. Her friends state that six weeks ago the eyes were not at all prominent, but that since then they have gradually become protruding. She has become excessively nervous, and often has slight attacks resembling angina. Two weeks ago the feet began to swell. She has had to get up at night to pass water, but the urine contains no albumen. Five months ago menstruation stopped, but it has now returned. Previous to five months ago it was natural. She thinks that she does not lose too much.

She has a good appetite, but after eating, feels a weight and oppression in the stomach. When I ask in regard to the condition of the bowels, she states that they are "regular," but further questioning shows that she has sometimes six stools a day. I have hundreds of times been deceived by accepting the statement that the bowels were regular as meaning that there was one natural stool a day, while the patient only meant that there were stools every day, and if there were twenty, all the better. There is such a passion for loose bowels that people will often say that the bowels are regular when there is actual diarrhoea. During the past two years there has been a great deal of diarrhoea. There are at least two stools every day, which she says are of natural consistence.

Here then we have a history of premature work, resulting in breaking down the general system, with the development of nervous symptoms through a number of years, with palpitation of the heart, and as the next symptom with this enlargement of the thyroid, and recently with a little protrusion of the eye-balls. During all this time, the evidences of gastro-intestinal catarrh have been present. From such a history one would naturally suspect this to be a case of exophthalmic goitre, or Graves' disease.

The pulse is 124 per minute, and the action of the heart is quick and jerking. The respiration is so jerking that it is difficult to say whether or not there is a mitral murmur, but I think there is none. There is a murmur heard over the pulmonary valve. This is probably anæmic (hæmic).

The thyroid gland is monstrously enlarged; it pulsates, but is not the seat of a strong thrill. There is a slight thrill. The vessels of the neck are all distended, and the enlarged gland has pushed the sterno-cleido-mastoid muscle far back, and displaced the carotid artery, which is entirely superficial, and pulsates, as you see, directly under the skin. This is remarkable. The artery can readily be rolled under the finger. On the left side the artery is not displaced in this way. Over the right carotid there is no murmur. There is a slight murmur over the enlarged gland. No murmur is heard over the lateral sinus of the brain, where a murmur is sometimes heard; nor is there any over the longitudinal sinus.

We have then a case of marked exophthalmic goitre, of which the protrusion of the eyeballs is the least prominent symptom. The development of these cases varies greatly. The heart trouble, as a rule, begins with palpitation, which may for some time be regarded simply as a functional irregularity of the heart. In many instances, this has been preceded by impaired nutrition resulting from

gastro-intestinal disorder, which is often conjoined with chronic diarrhœa. I have seen so many cases in which this affection has been associated with gastro-intestinal catarrh, that I am disposed to think, either that the catarrh actually serves as a strong predisposing element in the development of the disease, or else that it is the result of an analogous morbid process in the sympathetic ganglia of the abdomen, whose derangement we know often causes diarrhœa, and this may be subsequently followed by a morbid state of the vaso-motor ganglia, governing the action of the heart. I believe that one or other of these relations subsists between catarrhal diarrhœa, lasting through a long period of time and the subsequent development of exophthalmic goitre. Then as most of these cases are in women, we find partly from the nervous disturbance, partly from the anæmia and partly as a predisposing cause, uterine derangement in a large number of cases. There is often menstrual disturbance and ovarian irritation. In this girl the gastro-intestinal derangement has been the most marked feature among the predisposing elements, while the uterine disturbance has only shown itself in the last six or seven months, when she had amenorrhœa for five months, although the menses have now returned.

After the heart has continued in this disordered state for a variable time, thyroid enlargement appears. This may appear early. The gland may enlarge symmetrically, or only one lobe at a time be affected. The enlarged thyroid is the seat of pulsation and often of a thrill. The carotid arteries pulsate violently, and they are at times distended. In the present instance, they are distended, and on the right side displaced. After these symptoms have continued for some time, exophthalmos usually appears, and advances to varying degrees, sometimes remaining slight, sometimes so great that the globe cannot be covered, and the cornea becomes ulcerated from exposure.

During this time the patient grows breathless, exhausted, weak, and anæmic, and frequently we have evidence of this anæmia in the appearance of dropsy. We have in this patient a typical case, with the exception of the exophthalmos. Such cases are often curable, and always can be improved unless the disease has been allowed to go on to the latest stage.

The treatment of such a case consists in the regulation of digestion, the promotion of nutrition, the strengthening and control of cardiac action, the control of nervous excitement, and the promotion of contraction of the enlarged thyroid. Careful hygiene and regulation of the diet is required. An exclusive milk diet sometimes works marvels. The use of digitalis and iron in an acceptable form, the occasional use of ergot, and the use of absorbents, of which iodine and iodoform are among the best, are useful remedies. As a matter of fact, excellent results are obtained from the combination of iron, iodoform, and digitalis.

I shall order for this girl a pill containing one grain of reduced iron and one grain of iodoform, to be taken twice daily and gradually increased to two pills three times a day. Three times a day between meals, she will receive a sufficient amount of digitalis (from eight to twelve drops of

the tincture) to control and strengthen the action of the heart.

This treatment will be continued for two or three weeks, when she will return and report results. We shall have her weighed and the number of blood globules counted.

The diet will be strictly regulated, and will consist of milk, rare meat, and soft eggs. All hard and coarse food will be avoided, so as to prevent diarrhœa. She states that she has been using a good deal of coffee. This must be stopped, for I know of no substance more injurious than coffee.

I think that when we again see her, she will be greatly improved.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Nitro-Glycerine and the Chloride of Gold and Sodium in the Treatment of Albuminuria.

BY ROBERTS BARTHOLOW, M. D., LL. D.

Meeting December 19, 1883.

Hitherto the therapeutics of renal diseases have not advanced in the same ratio as our knowledge of their pathology. It cannot be said now that a cure has been found, but that two remedies of real value are available. My contribution to this symposium on albuminuria, consists in an attempt to define the place which these remedies should occupy in a curative scheme.

How and when are these remedies to be used?

Nitro-glycerine is now administered, as all present know, in the form of the centesimal solution—1 minim of the pure drug to 100 minims of alcohol. The initial dose of this one per cent. solution is one minim, which should be increased until the very characteristic physiological effects are produced. The susceptibility to the action of nitro-glycerine varies greatly, and hence the dose cannot be stated in advance. It is necessary to produce some obvious effect. To maintain the same level of action, a slight increase in the dose may be required from time to time. As the effect is not lasting, the interval between the doses should not exceed three or four hours.

The administration of nitro-glycerine should begin in acute cases immediately after the subsidence of the acute symptoms. It is indicated in chronic cases at all periods, but is more especially useful if given before hypertrophy of the muscular layer of the arterioles has taken place. When it acts favorably, the amount of albumen in the urine steadily diminishes. The mechanism of its action consists in the lowering of the pressure in the renal vessels. How far any curative effect proceeds from action of this remedy on the sympathetic system, remains to be determined.

Chloride of gold and sodium is indicated in the subacute and chronic cases, especially the latter. The earlier it is given the better, if structural changes are to be prevented or arrested. The good effects to be expected from it will depend necessarily on the extent of the damage already inflicted on the kidneys.

The usual dose is $\frac{1}{20}$ grain, twice a day, but this

may be much increased, if necessary. At the outset, $\frac{1}{10}$ grain may be given; in a week the dose should be lowered to $\frac{1}{20}$ grain, and after a month the regular dose of $\frac{1}{20}$ grain should be steadily pursued, with occasional intermissions. Indigestion, gastralgia and colic pains, nausea or diarrhœa, are occasionally caused by it; and if so, the quantity administered must be reduced. It is usually borne without any discomfort, but after prolonged administration, salivation, weakness, emaciation, trembling, and other nervous phenomena, may possibly occur. Such effects, however, are wanting in my experience.

The treatment of albuminuria by nitro-glycerine and the chloride of gold and sodium, does not necessitate the exclusion of other means—hygienic, climatic, or dietetic. These remedies should, however, be given uncombined, at different hours, and their actions should not be hindered or obscured by the effects of other agents given with like purpose. To this general statement there may be two exceptions: with nitro-glycerine, amyl nitrite or sodium nitrite may be given; with the gold and sodium chloride, corrosive sublimate may be combined. If doubts may be felt in regard to the propriety of depending on the utility of these remedies, they need not be long experienced, for if no good effects are observed in two weeks, they may then be discontinued.

The Supposed Connection Between Ear Disease and Kidney Disease.

By Charles H. Burnett, M. D.:

Early writers on disease have shown a knowledge of the fact that alterations in hearing occur in the course of general diseases, as for example, in diseases of the kidneys. It was supposed by them that the alteration in the functions of the ear, in this form of disease, was due to changes in the auditory nerve. But the results of the more reliable modern investigations tend to show that if an ear disease be due to a kidney disease, the lesion usually occurs in the tympanic cavity, and not in the auditory nerve.

Certainly accidents of a hemorrhagic or apoplectic nature might be expected either in the tympanic cavity or internal ear, in Bright's disease, when we reflect upon the deterioration of the blood, and upon the malnutrition and friability of the vascular system, in the later stages of the malady. Further, as Bright's disease is characterized by a tendency to inflammation, especially in serous membranes, and as the membranous structures of the internal ear, or labyrinth, belong to this class of membranes, very naturally organic change in these tissues might be looked for in Bright's disease of the kidneys.

However, as late as 1856, Ran, in his "*Ohrenheilkunde*," published in Berlin in that year, claimed that there was not a solitary reliable observation at that time on record, in favor of any symptomatic relation between the ear and the urinary organs.

In 1869, Schwartz* reported a case of extravasation of blood into the tympanum, as peculiar to Bright's disease, though of rare occurrence; and in the same year, Dr. G. M. Smith, of New York,† "called attention to the fact that impair-

ment of hearing was at times one of the symptoms of Bright's disease, and a symptom which could not be explained by referring it to uremia."

In 1873, Dr. Roosa, of New York, in his treatise on the ear, refers to an obstinate case of suppuration and pain in the middle ear in a man sixty-one years old, suffering from Bright's disease. In this case, it was supposed that the effect of the renal disease upon the tympanic vessels was the cause of the acute suppuration, and it was also supposed that the disease in the drum cavity was originally hemorrhagic in nature. The subject was deemed of enough importance to place a physician on his guard for renal disease, in cases of hemorrhage into the tympanic cavity.

It must not be forgotten, however, that there is a purely sthenic form, otitis media hemorrhagica, occurring in subjects entirely free from kidney disease, in which the only effusion is pure blood, the removal of which from the tympanum by paracentesis, is followed by cessation of pain and return of hearing.*

Again, in 1878, Schwartz† states that serous catarrh of the tympanic cavity, is found in syphilis, heart disease, pneumonia, Bright's disease, naso-pharyngeal catarrh, and apparently may be due sometimes to vaso-motor disturbances. The same author says, hemorrhages into the labyrinthine cavity and the membranous labyrinth occur in kidney diseases.

Also that extravasations of blood into the tympanum (*hæmato-tympanum*) occur spontaneously with acute inflammation in morbus Brightii, cynanche diphtheritica, and in endocarditis verrucosa recens et ulcerosa (op. cit., p. 94).

Dr. Paul Pissot,‡ in an inaugural thesis, is disposed to consider three forms of aural disease, which may arise in Bright's disease, viz.: tinnitus aurium, partial deafness, and complete deafness. His conclusions are, that affections of the hearing may arise at the beginning or during the course of the renal disease. Intermittence seems to be characteristic of these forms of deafness, which may be contemporaneous with the œdema, or may precede it. They appear with all forms of the disease, and are manifested with variable intensity. But he cannot say to what special lesion of the ear, or of the nerve of hearing, their symptoms are attributable. Delacharrière, a responsible aurist, examined the cases upon the history of which the thesis is based, and found rupture of the membrana tympani, abnormal vascularity of the manubrium, and sclerosis of the tympanum, and was disposed to regard the conditions as causative forces. Pissot held that the hypothesis of Rosenstein, according to which there is œdema in the course of the auditory nerve within the cranium, may explain the intermittence and variations of intensity in these morbid manifestations. This latter process may be analogous to œdema of the glottis and vocal cords noted in Bright's disease by Fauvel, in 1864. A similar symptom has been noted by Sée.

In alluding to chronic, non-suppurative aural

*Roosa, Transactions Amer. Otol. Socy., 1872, and O. D. Pomeroy, *Ibid.*, 1875.

†Pathological Anatomy of the Ear. J. O. Green's Translation, pp. 97 and 157.

‡These pour le Doctorat en Médecine. Faculté de Med. de Paris, April 4, 1878.

*Archiv. f. Ohrenheilkunde, Bd. iv., p. 12.

†N. Y. Acad. of Med. See Roosa's Treatise, 1873, p. 257.

catarrh in children, Von Troeltsch* says: "A greater blood pressure from increased action of the heart, as in Bright's disease, must necessarily produce a certain hyperæmia, even in the mucous membranes of the head."

Dr. Albert H. Buck,† of New York, expresses the opinion that in some instances a serous fluid, deeply tinged with the coloring matter of the blood, finds its way into the tympanic cavity through other than inflammatory causes. "Instances of the latter form of disease are very rarely met with, and then usually in connection with a depraved state of the general nutrition, as in morbus Brightii."

Dr. Maurice Raynaud‡ expresses the opinion that diabetic otitis is not only more frequent than is supposed, but that when this has once become a well-known fact, it may prove a pathognomonic index, like anthrax, diffuse phlegmon, and certain erythematous eruptions about the genitals, and arouse suspicion of the presence of the renal disease hitherto unsuspected. He cites a case of well-marked diabetes mellitus, in which there suddenly occurred, one evening, a severe earache, and most carefully watched, so that no chilling could have been the cause of the ear pain. The pain became intense, and toward midnight of the same evening in which the pain set in, there occurred an abundant hemorrhage from the drum-cavity of the affected ear, which was followed by immediate relief. This was followed for several days by a copious sero-sanguinolent, and then serous discharge, which contained leucocytes and albumen, as shown by heat, but no sugar. Post mortem examination, twenty-three days after the attack of otitis, revealed a large perforation in the anterior segment of the membrana tympani, red, fungous and bleeding mucous membrane in the drum-cavity, in which there was a pink, purulent liquid. The ossicles were not dislocated, but were imbedded in granulations, and near the stirrup was a clot of blood. The mastoid cavity was filled with a rose-colored liquid, containing pus-cells, and its bone substance was greatly injected and marbled, presenting all the appearances of inflammation of bone tissue. The labyrinth showed no alterations. The author concludes that otitis in the petrous bone is a peculiar and constant symptom of diabetic otitis.

P. McBride,|| in an article devoted to the consideration of the various causes leading to aural disease, states that "occasionally the ear is affected in Bright's disease by hemorrhage into the tympanic cavity. The tympanum becomes filled with blood, which probably either becomes absorbed or leads to suppuration. Schwartz was, perhaps, the first to observe this condition." McBride further says: "I am not aware that sudden labyrinthine deafness in the course of Bright's disease has been described, but it seems probable that such a contingency might be looked

for here and also in pernicious anæmia, in which retinitis hemorrhagica is not uncommon."

In the recently published work of Prof. Politzer,* on the ear, the author's experience is that in cases in which a supposed connection existed between the organic renal disease and an aural malady, the fundamental cause lay in very apparent changes in the middle ear. He has also found that "catarrhs of the ear run an unfavorable course in tuberculosis, Bright's disease, and all cachexiæ by which the nutrition of the general system has become deteriorated."

CONCLUSIONS.

1. Evidences in favor of either frequent or well-marked aural lesions, dependent upon renal diseases, are extremely meagre.

2. Those lesions in the ear, which have been found in connection with Bright's disease and diabetes mellitus, and which may have been dependent upon the dyscrasia induced by these renal disorders, are in the form of sero-sanguinolent and hemorrhagic effusions into the drum cavity. But the latter must not be mistaken for the sthenic form of otitis media hemorrhagica.

3. From the serous nature of the membranous structures of the labyrinth, organic changes might reasonably be expected in Bright's disease, but positive proof of the occurrence of such lesions based on ante- and post-mortem history is wanting.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Notes of a Case of Inflammation of the Cervical Portion of the Spinal Cord, the Result Probably of an Injury; Followed by Tetanic Symptoms.

BY J. CHESTON MORRIS, M. D.

I desire to call the attention of the Fellows to the following report of an interesting case in which the diagnosis was obscure:

On Sunday, November 25, I was consulted by Dr. ——— about the case of his daughter, an intelligent, lively girl, aged 12, of spare, nervous habit, but generally good health, except that about a year previously she had suffered from slight chorea. He thought she had mumps, but was afraid that the stiffness of her jaws and slight pain in the back and neck, which were all the symptoms complained of, might be due to diphtheria or else to cerebro-spinal meningitis. I told him I thought it was probably only the result of a slight cold, and was rheumatism; if, however, he felt uneasy, he had better send for Dr. Darrach (in whose neighborhood he lived), and, if necessary, I would see her in consultation. Dr. D. telegraphed me to meet him the next morning, and he told me he had found the girl's jaw firmly locked the previous evening, and there was considerable opisthotonos. As we entered the room, a convulsive movement passed over her features, with much suffusion of the face, which soon subsided, leaving, however, a sardonic expression of countenance, and marked opisthotonos. We both thought these convulsive movements might have arisen from dread of my repeating the efforts which had been vainly made the night before to open her jaws; but it was soon evident that this

* Diseases of the Ear in Children. J. O. Green's Translation, 1882, p. 67.

† Diagnosis and Treatment of Diseases of the Ear, N. Y., 1880, p. 164.

‡ Clinical lecture at La Charité, Paris. Annales des Maladies de l'Oreille, etc., March, 1881.

|| Edin. Med. Journal, February and March, 1882.

* Cassell's English Translation, 1883, Philadæ.

was not the case. She complained of no pain, and bore handling and examination well, but nothing further was elicited. Her pulse was about 119, skin and temperature normal or nearly so, tongue slightly furred, respiration rather frequent, but no evidence of lung or heart trouble. She lay on her right side, her head drawn back, with the spinal muscles strongly contracted, and occasionally spasmodically drawn. The abdominal walls were somewhat harder than natural.

Our diagnosis was congestion of the cervical region of the cord, whether of choreic or rheumatic origin we were in doubt, as the symptoms and history gave no clue. Still, the indication seemed to be to allay the spasm, and we directed the administration of full doses of fluid extract of conium, alternated with full doses of opium and belladonna, and liquid nourishment. Dr. Currie assisted Dr. Darrach in charge of the case. I saw her again on Wednesday morning; her pulse had fallen to 104; skin and temperature normal; she expressed herself as rather easier, and wished to be moved to the other side of the bed, which was accomplished, to her relief. The trismus had yielded very slightly; the spasms occurred at longer intervals, but were rather more marked. Dr. D. thought there had been some increase of reflex cutaneous sensibility the day before in the lower extremities, but this had passed away. Careful examination showed absence of the patellar tendon reflex, but the sensitiveness of the skin to touch was normal. Our conclusion was that the spinal congestion had passed or was passing into the stage of effusion, but as it did not seem to be extending, we hoped for a good result. The bowels had not been moved, and were becoming distended with flatus; enemata of flaxseed tea and assafoetida were, therefore, ordered, and previous treatment continued. She, however, soon after became worse; delirium supervened, and she died in a convulsive attack on Thursday, November 29, at 4 a. m.

I requested an autopsy, permission for which was given December 2, "if I still thought it necessary after learning that some three weeks previous to her sickness she had had a severe fall forwards, striking her head so as to make her nose bleed severely; the blood also settled under her eyes." The autopsy, at which only the cervical cord was allowed to be examined, took place at 4 p. m., three days and a half after death. On opening the spinal canal by an incision through the back of the neck and sawing through the vertebral processes on each side, a bloody serum escaped from it; the lining membrane of the canal and the dura mater of the cord were deeply congested, and the cord itself felt softened; it was detached as carefully as possible, and the finger passed up through the foramen magnum into the cranial cavity. The foramen was smooth, but just below it, on the anterior wall of the canal, the odontoid process of the second cervical vertebra was denuded, and felt rough to the finger, almost carious. Unfortunately, as permission had not been obtained for examining the brain, and it was important to avoid disfiguring the body, no ocular demonstration could be made. The portion of the cord removed was placed in the hands of Dr. Morris Longstreth, with the above history.

The case seems to me to be a very interesting and instructive one. An injury by *contre-coup* to the odontoid process, followed by inflammation of the spinal cord and tetanic symptoms coming on insidiously three weeks after the injury, in the case of an individual of choreic, rheumatic antecedents, was perhaps hardly to have been diagnosed more correctly with the information we had. I may add that her uncle, the son of one of the Fellows of this College, died of fracture of the cervical spine, the result of an accident, some thirty years ago.

I also subsequently learned that she had complained of pain in the back of the neck, after the fall, to the cook, and her mother informed me when I first saw her that she had for several days previously spoken of slight pain in the upper and middle part of the spine, which she supposed to be rheumatic or due to a slight cold taken while gathering walnuts. She also noticed on these days a peculiar drawn expression of the face, which occurred while she was at table, when the stiffness of the jaws was first noticed, which gave rise to the supposition that she might be getting mumps.

Dr. Morris Longstreth submits the following note on the examination of a portion of the cervical spinal cord.

The substance of the cord is slightly softened. The larger vessels of the pia-arachnoid are very full of blood, and very conspicuous. The general aspect of the surface is pinkish, indicating an injection of the smaller vessels. A cross-section of the cord presents nothing to note. The inner membranes can be more easily separated from the cord than normal, and it is apparent from their examination that there exists a slight exudation which renders their tissue somewhat opaque.

The microscopic sections were made, after a short immersion in alcohol and subsequently in Muller's fluid, by freezing. The tissues of the membranes appear swollen, their fibres are separated, and in places the interstices show a minute amount of exudation materials. The inflammatory material is seen also on their outer surface, but the amount of it is not considerable. It is composed of fibrinous threads in which are entangled a small number of nuclei. The blood-vessels are large, the swelling also affects their walls, and many of them contain blood corpuscles and clots. The specimens—those that were stained with a carmine fluid—show these parts deeply colored, and the nuclei are unusually conspicuous.

On the inner surface of the membranes toward the cord, the inflammatory changes of the same character are also seen; they extend into the substance of the cord but a short distance. The portion of the cord at its surface is markedly granular. The same changes are found in the portions of the membranes which extend into the anterior and posterior fissures of the cord, but at these parts the morbid condition is less distinct. The blood-vessels, ramifying in the substance of the cord, show slight alterations of a similar character, and around them at a few places there appears a very slight exudation in which the nuclei stain deeply.

The nerve tubules and the ganglion cells of the cord show no appearance of change. The tissue of the cord, however, showed some alterations.

Its general appearance was more granular than normal; this change was irregularly distributed, more marked always near the surface, but uneven in the depth of its extension. It is uncertain whether it is more marked around the capillaries in the interior of the cord, where it is often conspicuous in cases of tetanus. It must be noted that the effusion around these capillaries is very slight, however. The change of this tissue can be described as a granular disintegration, and, judged by its character and its situation, was probably induced by inflammation of the membranes affecting the contiguous parts of the cord. In one or two places, bundles of nerve filaments (cross-section of the spinal nerve roots) are seen attached to the outer surface of the membranes. Around these bundles and among the fibres, the inflammatory changes are especially well marked.

Remarks on the Post mortem Changes and the Microscopic Appearances.—The post mortem changes, taken in connection with the history and symptoms, show that the tetanic spasms were due to the inflammatory condition of the cord. The inflammation was most marked at the portion of the

cord from which are derived the filaments of the nerves distributed to the muscles alone implicated in the spasmodic contractions. It would seem that the impress was communicated directly to these nerves, probably before their exits from the dura mater, since we see the inflammatory changes conspicuous around some of the filaments of which they are made up.

The changes in the cord, as here seen, are not of the character found in tetanus; at least they do not equal in degree those usually found. Here the vascular exudation is very slight or entirely wanting, and the granular disintegration is slight and localized, and evidently communicated from the inflammation of the membranes. In tetanus we have no inflammation, the changes consisting of exudation, mostly or entirely fluid, which leads to granular alterations of the tissues of the cord. Here we have a very evident, though slight, inflammation, which has produced somewhat similar alterations of the cord, partial and much less in degree, and only approaching the tetanus changes in kind.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Pathological Relations and the Etiology of Diphtheria.

Dr. Edward F. Willoughby thus writes in the *Brit. Med. Jour.*, March 1, 1884:

1. 1. Recent microzoic pathology has established beyond doubt in some cases, and presumably in others, that infections and infective diseases, with a few apparent exceptions—if, indeed, they be exceptions—are caused by, dependent on, or constantly associated with, the presence of certain more or less differentiated forms of bacteria.

2. We are justified in considering these as specific—though, as in the case of the ova of man, ox, and dog, the specificity of which is clear enough, our visual organs may not be able to distinguish them—by the specific character of their effects in the body, the contagium of each disease producing the same, and not another.

3. Yet there is reason to believe that these specific forms may be evolved—except in the case of some of the most highly differentiated, as small-pox, the conditions necessary to whose evolution do not now exist—from non-specific and inert forms; and that thus some diseases, afterwards and usually propagated by contagion, may at times be evolved from extra-corporeal or other bacilli; in other words, may arise *de novo*, though not *de nihilo*.

4. These lower forms of bacilli, non-specific, but capable of developing into higher and specific forms, as well as the necessary conditions for their development, are most likely to be found in and among the processes of putrefaction of organic matter—processes themselves invariably set up by like organisms; and such diseases are thus, as

Murchison maintained, against Jenner regarding enteric fever, *pythogenic*.

5. While history and medical observation warrant us in denying such evolution, under existing social and sanitary conditions, in regard to small-pox and measles, and leave the cases of typhus and scarlatina open to differences of opinion, there is an overwhelming mass of evidence in favor of its frequent occurrence in enteric fever, and still more of diphtheria.

6. Bacilli of a more or less infective character are present in most forms of pharyngitis and tonsillitis, whether induced by exposure to and absorption of septic poisons, or by the usual causes of catarrh.

II. *Diphtheria* may be defined as an infectious and specific, though, perhaps, not highly differentiated disease, marked by some or all of the following phenomena. Locally, there is an inflammation of all or any part of the fauces, tonsils, pharynx, nasal passages, and larynx, characterized by the exudation of lymph rich in fibrine and proliferated epithelium cells and leucocytes, leading to submucous thickening and the deposition on the surface of a so-called false membrane of any degree of thickness and consistence. Generally, there are blood-changes or derangements of innervation and nutrition, manifested not only by pyrexia and albuminuria as in scarlatina, but by certain characteristic phenomena, viz., paralysis of the heart, of deglutition, and, perhaps, of voluntary muscles, of the nerves of special sense, and derangements of common sensation; these phenomena differentiating it from non-specific pharyngitis.

The local dangers are:

1. The liability of this exudation to putrefaction and the absorption of the putrid matter.

2. The obstruction of the glottis by the exudation.

3. The paralysis of the glottis, due to the inflamed state of its muscles, causing its margins to collapse during inspiration, while expiration is unaffected.

That this, and not spasm, is the cause of the suffocation is evident, because—

1. Muscles actually inflamed are not subject to spasm, but rather to loss of contractile power.

2. So long as the glottis is not obstructed by membrane, expiration is not impeded.

3. Identically similar respiration follows division of the laryngeal nerves, *i. e.*, artificially produced paralysis.

4. Is also heard when artificial respiration is performed on the dead body in which the glottis is passive.

III. *Diphtheria and Croup*.—Croup is an equivocal expression, being popularly applied to any cough marked by a peculiar brassy sound, indicating its origin in any abnormal condition of the larynx. It may thus mean—

1. Simple or catarrhal laryngitis.

2. Laryngismus or true spasm of the laryngeal muscles, arresting, during its continuance, both inspiration and expiration.

3. Laryngeal diphtheria.

The last name is by some physicians restricted to cases of diphtheria, originating in the larynx itself; but identical symptoms and consequences follow the extension of the diphtheritic process from the pharynx to the larynx; and such a distinction is unscientific, and without any practical value.

"Croup," therefore, if not simply catarrh, or a reflex spasm of the glottis, is, and should be called, diphtheria.

IV. *Diphtheria and Tonsillitis*.—In catarrhal tonsillitis, the increased and altered secretion of the tonsils thickened by cell-proliferation distends and protrudes from the crypts in the form of whitish points, which may ultimately coalesce, undergo putrefaction, lead by absorption to inflammation, and even suppuration of the cervical and submaxillary glands, or assuming a fibrinous character simulate diphtheria; but in such cases albuminuria, and the nervous derangements characteristic of diphtheria, are absent.

More often the inflammatory process is localized, and pseudo-abscesses in the tonsils, and enlargement of the neighboring glands, are the only consequences.

V. Though the great majority of cases of tonsillitis and pharyngitis are purely catarrhal, set up by exposure to cold and wet, to irritants, etc., experience places it beyond doubt that they may be produced by the absorption of septic agents, as sewer-gas, etc. Between these cases and well-marked diphtheria it is impossible to draw any satisfactory line of demarcation, and we are justified by analogy as well as by clinical observation in believing all such cases of septic tonsillitis and pharyngitis to be essentially the same as diphtheria.

By analogy, even in those fevers whose lesions are usually visible and unmistakable, we meet with obscure and unrecognized cases, cases whose true nature is only revealed by their remoter consequences, as albuminuria in scarlatina, or even by

their merely giving rise by infection to other cases which admit of no such doubt. We have small-pox with one pustule, and why not with none? scarlatina without visible eruption, enteric fever marked only by slight intestinal derangement and malaise or weakness, and so on.

Clinically, I have seen three sisters with what seemed to be a common foul-smelling sore-throat, but in one of whom fatal laryngeal symptoms rapidly developed, she being a feeble child of five, and they healthy girls of fourteen and sixteen years. In none was there any visible exudation on fauces or pharynx.

I, therefore, firmly believe that diphtheria is of far more frequent occurrence than is commonly supposed, and that all, or nearly all, cases of sore throat evidently connected with unsanitary surroundings, and affecting, simultaneously or consecutively, several members of a family, are to be reckoned as diphtheria.

VI. *Etiology*.—The connection between sewer-gas and fecal or other putrid accumulation in or around dwellings, and diphtheria, has long been recognized by medical men, especially those resident in towns. But, of late, several rural practitioners and medical officers of health have advanced a theory of meteorological causation. Dr. C. Kelly, medical officer of health for West Sussex, insists on the fact that, while diphtheria is scarcely known in Worthing, it is very prevalent in the rural districts; and he attributes it to exposure to cold and wet in going to and from distant village schools. In the reports of the German Imperial Board of Health, I observe that it is at times fearfully prevalent in the rural districts of Saxony; and, in those of the Board of Health of Michigan, I find that among the sparsely-peopled settlements in the backwoods, amid foul and stagnant pools, etc., its ravages surpass all example.

I do not deny the facts adduced by Drs. Kelly, Slane, King, etc., but I do their inferences; for where does one meet with foul dunghills, pigsties, etc., in close proximity to houses, saturating the soil with putrescent matter, or with cesspools side by side with wells, more frequently than in such villages and rural homesteads?

Again, it is remarkable that, in Munich, as Dr. Soyka has shown, enteric fever prevails most in those quarters provided with old and pervious sewers, next in those with good sewers, but where the houses are not properly disconnected therefrom, and least in those without any sewers at all; whereas diphtheria is constantly present in the latter, drained only by the *Stadt-bäcker*, and with cesspools dug in the porous rock. Thus, diphtheria and enteric fever exist in Munich side by side, but in inverse proportions, in the several quarters of the city. In fact, it would appear that surface-accumulations of filth are more likely to generate diphtheria, and pent-up putrid gases to produce enteric fever.

Hypodermatic Injections of Calomel in the Treatment of Syphilis.

The *Med. News*, quoting from the *Annales de Dermat. et Syphil.*, says;

It being granted, says Dr. Louis Jullien in a recent note on this subject, that the hypoder-

matic treatment of syphilis is the preferable method, what mercurial preparation shall we use? While Lewin, of Berlin, and the majority of practitioners, have expressed a preference for soluble and easily-absorbed preparations (the bichloride and the peptonate of mercury), Scarenzio has recommended the use of calomel, in suspension, as a very manageable preparation. The first experiments of Scarenzio were made in 1864. Now, twenty years after, his method has received new attention.

The formula first used by Scarenzio was:

Calomel,	gr. ii.j-ivss.
Glycerine,	℥ xxv.

Smirnof modified this formula to one part, by weight, of calomel, to ten parts, by weight, of glycerine. At each injection about gr. ii.j. of alcohol were thrown into the cellular tissue; but in feeble and anæmic women only about gr. j. was used. Scarenzio still further modified this form by using mucilage:

Calomel,	gr. $\frac{3}{4}$ -ij.
Powdered gum Arabic,	gr. $\frac{3}{4}$.
Distilled water,	℥ xv.

The needle of the syringe used should measure at least one inch long. This is important, as in women especially, and in men sometimes, a small abscess will form at the end of the track made by the needle, and the inflammation extend up through it.

As to the choice of locality for making the injection, the posterior part of the upper arm is preferable, then the back and the back part of the shoulders. Smirnof says:

1. The substance injected *between* the skin and the muscles is not exposed to pressure.

2. The integument over the buttocks is so thick and firm that, even if the injection causes inflammation, the small quantity of pus formed will not reach the surface, but will be absorbed. After having chosen some point at which to make the injection, the skin is pinched up and the needle passed under it, but not into the muscular structures.

The effect of the injections, in the treatment of the secondary manifestations, is very quickly seen. All who have used the method of Scarenzio, declare that the period of illness for each syphilitic has been greatly diminished by it. The promptness with which the secondary eruption disappears is greater than with any other remedy.

The action of calomel injections is, according to Smirnof, much more energetic than that of other remedies. Smirnof also insists upon the value of this method in the manifestations of the tertiary stage. Pirocchi and Porlezza have already cited the case of gummous syphilis of the brain cured by two injections, and several others of periostitis and osteoscopic pains. Calomel injections are well borne by young children. After the injection of gr. $\frac{6}{13}$, $\frac{7}{11}$, or $\frac{9}{10}$, they do not appear to suffer, and become quiet. In cases of older children, injections of gr. $\frac{9}{10}$ to ii.j. are sufficient to cause the complete disappearance of all manifestations, whether secondary or tertiary.

As to the number of injections, Scarenzio's first views have been proved to be well founded. Gr. vj. of calomel are ordinarily sufficient to cause all syphilitic accidents to disappear. This repre-

sents four injections of gr. iss., given two at a time, the interval between the first and second two being three weeks. These four injections will replace all the arsenal of pills, frictions, washes, etc., and the patient only needs the physician once in three weeks.

Tubercular Meningitis.

The *London Med. Record*, January 15, 1884, tells us that Dr. Wortmann contributes (*Jahrbuch für Kinderheilkunde*, Band xx., Heft 3), a long and valuable analysis of fifty-six consecutive cases of this disease; thirty of the patients were girls, and the ages were from ten months to eleven years, about three-fourths of the whole number being from two to five years old. All but six were poorly nourished on admission, and twenty-five had enlarged glands. A family taint could be traced in twelve. The first symptom of the disease proper appeared to be vomiting, which took place usually once or twice a day, or oftener; but very seldom occurred at night. It nearly always ceased when the pulse became slow, though in one case it continued throughout, and could not be subdued. Contrary to the experience of many, in five cases the vomiting returned after a cessation of from two to four days. In four patients vomiting was absent. Constipation was present throughout in forty-two cases; in ten it gave place two or three days before death to involuntary motions; while in the remaining four, diarrhœa persisted throughout the complaint. Headache, with one exception, was a constant symptom. The abdomen was markedly retracted in thirty-four cases, and moderately so in the rest, but the author's experience did not support Vogel's view, for in only three was there any apparent tonic spasm of the abdominal muscles. Irregular respiration was never absent; but as the end approached, it usually gave place to severe dyspnœa. The pulse appears to have followed the recognized course. It became rapid a few hours before death in every case. Fever was present even in the prodromal stage. In the first stage proper, it was never over 104°, and showed morning remissions of nearly two degrees. When the pulse became slow the temperature began to fall, but was some days before it reached the normal point. In sixteen, however, it rose instead of falling; and six of this number were without complication. In the third stage the temperature varied very much in different cases; but, as a rule, either rose or remained the same. Occasionally it fell, and in two cases it sank to 89.6. Shortly before death it suddenly rose, in uncomplicated cases, to a great height, as *e. g.* from 99° to 106°. After death, the temperature rose moderately where it had been previously high for some time; but, where the rise had been sudden, it rose a great deal; in other cases, it gradually sank after death. Retraction of the head was present in all but one case, and commenced when the pulse became irregular; in one the head was drawn towards the left as well as backward, and here a large tubercle was afterwards found on the left side of the cerebellum. Hyperæsthesia was present in all but one of those cases in which the spinal meninges were involved. Herpes zoster appeared in one of these cases. The urine was

carefully examined, but showed no constant alteration; the urea was sometimes increased, sometimes diminished. Photophobia was a frequent symptom. The pupils in the first stage were chiefly remarkable for their sudden variations, without any corresponding changes in the amount of light. When the pulse became slow and irregular, the pupils dilated and were sluggish. A transient difference in the size of the two pupils was frequently observed, but appeared to have no connection with the position of the child. On the pulse becoming rapid again, the reaction to light was generally lost, and the pupils were either contracted or of normal size. The ophthalmoscope was used in twenty-seven cases. Of these, twelve presented a normal fundus, four showed tubercles on the choroid, ten venous hyperæmia of retina, and amongst these were four with optic neuritis. One case showed hemorrhages and cloudy papillæ (on autopsy large tubercles were found in the cerebellum, but no nephritis). Nystagmus was observed five times, ptosis six times. General convulsions set in, with commencing coma. Partial convulsions, which affected chiefly the face, appeared earlier; the pupils became dilated during the paroxysms. Paralysis, which, however, was never complete, affected in different cases the eyes, face, and extremities. In the last it was preceded by clonic spasm of the part affected. The *tache cérébrale* was present, in a varying degree, in the majority; but flushes, alternating with pallor, of the face, were remarked in all. The skin was dry until near the end, when sweating broke out. The duration of the disease was from six to forty-five days, with an average of eighteen.

The necropsies showed general miliary tuberclosis in forty-five out of the fifty-six cases. Cheesy deposits, chiefly in the bronchial and cervical glands, were found in all. The spleen was tubercular, either in substance or on the capsule, in every case. It was enlarged in twenty-eight patients. The mesenteric glands were always enlarged, and in fifteen cases they were cheesy. The exudation at the base of the brain was of a more or less gelatino-purulent character; it frequently extended forward so as to involve the olfactory lobes. The convexity was involved in fourteen cases, but there was no case in which the convexity alone was affected. The ventricles were dilated. The choroid plexus showed tubercles in nineteen cases, and contained a moderate quantity of blood in all. The spinal cord was examined in the last twenty-seven cases. In four of these, no change was found. In the remainder the spinal fluid was increased, and often turbid. The pia mater, especially in its posterior aspect, was thickened, yellowish, and tuberculous, in direct proportion to the duration of the disease. In four, the dura mater was thickened, and in two cases the spinal cord was the seat of a large solitary tubercle.

Operative Interference in Irreducible Luxations.

The *London Med. Record*, March 15, 1884, says that M. G. Poincot, of Bordeaux, in an able review on direct operative intervention in irreducible luxations (*Revue de Chir.*, No. 8, 1883), has collected a number of interesting clinical records, on which are based the following conclusions.

Luxations, if studied with regard to the feasibility of operative treatment, may be arranged in three classes:

1. Recent luxations that have not existed longer than eight days, and in which the process of repair has hardly begun.

2. Luxations which have existed for more than fifteen days, but have not passed beyond the general limits assigned by authors to irreducibility; these M. Poincot would call intermediary.

3. *Old* luxations, being such as have passed beyond these general limits.

In cases of the first class—that of *recent* luxations—the indications for operative interference must be very limited. The works of Bigelow on luxations at the hip, of Kocher on those at the shoulder, and of Farabeuf on those of the thumb—the most exposed amongst articular displacements to irreducibility—have shown that the obstacle to reduction is formed almost exclusively by a certain portion of the capsular apparatus, and have made known the most rational and efficacious means for overcoming—or, rather, for turning—the difficulty. The number of rebellious forms of recent luxation have been much reduced, and operative intervention in this class is seldom permissible, save in cases of obstinate luxation at the ankle and of the thumb. M. Poincot advocates tenotomy in the treatment of irreducible luxation at the ankle, and states that backward displacement of the thumb (if it resist attempts at reduction by over-extension or by circumduction) may be justifiably treated by subcutaneous section. Arthrotomy and articular resection are quite out of the question in dealing with recent luxations. On the other hand, arthrotomy, followed or not by resection, is justifiable in certain of the so-called intermediary luxations; as, for instance, in cases of luxation at the shoulder when the limb is rendered powerless through compression of nerves; in cases of antero-posterior luxation at the knee, with symptoms of vascular compression; and in cases of luxation of the thumb, where the free use of the hand is impeded. In every other instance of this second class of luxation, laying open the joint ought to be rejected. Even in the above-mentioned exceptional cases, in which operative intervention is permissible, arthrotomy should always be preceded by subcutaneous section of ligaments and tendons, and, if necessary, of adhesions. In cases of *old* luxations, as in those included in the two preceding classes, subcutaneous section (according to M. Poincot) should occupy the first place. In dealing with the question whether—if reduction remain impossible after such sections—arthrotomy should be practiced, a distinction, it is stated, ought to be made between ginglymoid articulations, which are formed in one segment by two bones, and enarthrodial articulations, in which there are but two opposing bones. In the former kind of articulation, as the elbow, the knee, and the ankle, arthrotomy seems to M. Poincot to be the best mode of intervention. In an irreducible luxation of long standing of an enarthrodial joint, osteotomy is preferable to arthrotomy, which is to be regarded here as a useless and dangerous operation. An exception, however, is made in the case of irreducible luxa-

tion of the thumb, as here a serious and impeding deformity can be removed by resection alone.

Incubation of Infants.

The *Med. Press*, February 27, 1884, says:

The results obtained by the aid of an incubator for rearing infants have just been published by M. Auvard, resident at the Maternity Hospital, in his *Archives de Tocologie*. The first incubator was used in Paris by M. Tarnier, and consists of a large wooden case divided into two portions, the lower of which contains warm water, while the infant is placed in the upper one.

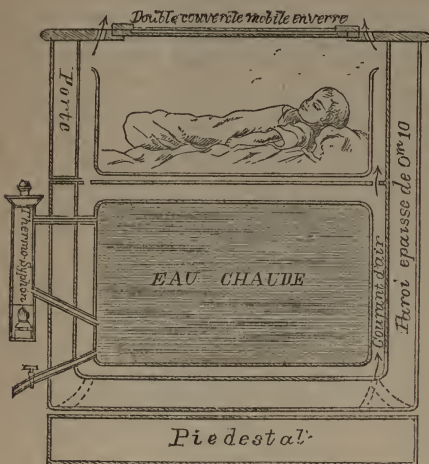


FIG. 1.

At first the incubator was heated by means of a thermo-siphon, but this system has been abandoned, fearing that through the negligence of the attendants the lamp would be left alight too long. The apparatus is now heated by filling the reservoir with boiling water both morning and evening, and thus a mean temperature of 30–32° C. is kept up. The child is clothed in the usual garments, because, if the skin was in contact with the air at a temperature of 32° C., it would lose some of the animal heat, and when taking out the infant to feed it, the danger of cold would be very great were it unclothed. Among the different cases (151 in number) in which the incubator was used, there were 93 infants which were born prematurely. Of these, 31 died. M. Auvard based his statistics on the weight of the children, and discovered that among those who weighed less than 2,000 grammes the death-rate was at the "Maternité," 66 per cent.; at that of Paris, 65 per cent.; while in those places where the incubator was used, it was only 38 per cent. In the treatment of oedema, which is a serious infiltration of the tissues caused by the bad state of the infant when born, and the rigors of the exterior temperature, and in which, as a rule, 16 out of every 20 cases die; when the incubator was employed, only 4 of the 25 placed in it failed to recover. It has been said that children brought up

in this way die when exposed to the outer air, but such is not the case, as M. Auvard conclusively proves. It has also been stated that immature children placed in the incubator only live one or two months, viz., until the time arrives in which they ought to have come into the world; but this objection is not founded on any scientific basis, and is therefore not of any value. M. Winckel, of Dresden, has started a new theory of permanent baths, but we have not investigated it sufficiently to form any opinion.

Gangrene of the Abdominal Integument Following Puerperal Parametritis.

The *London Med. Times*, February 23, 1884, says that Dr. M. Thiede, of Lübeck, relates two cases of the above rare kind in a recent number of the *Zeitschrift für Geburtshilfe und Gynäkologie*. He has not been able to find any previous description of this complication. The first patient, aged 27, delivered of her second child, went on well for eight days. Then she began to have abdominal pain and headache, with sleeplessness and febrile symptoms, and the lochia, which were purulent, became again sanguineous. The hæmorrhage from the uterus continuing, in spite of general treatment, on the 17th day of the lying-in the interior of the uterus was explored under anæsthesia, some outgrowths from the placental site removed, and the cavity washed out with a carbolic acid solution. From the second day after this treatment the bleeding completely ceased; but febrile symptoms continued, and a firm parametric infiltration developed around the cervix. Signs of cystitis then appeared, and to this was soon added a tender swelling of the integuments on each side along Poupert's ligament. This continued to spread till it reached to within three fingers' breadth of the navel. The swelling was at first hard, then became soft and boggy. On the 23d day after the operation vesication appeared, then subcutaneous abscesses, and finally the skin sloughed in one piece, leaving a granulating surface reaching from one iliac spine to the other, and to the height already mentioned. Aided by skin grafting, this healed up, and the patient did well. The second patient was aged 25, and had had three children and one miscarriage. A second miscarriage at the third month occurred; and for three days after this the patient went on well. Then came profuse hæmorrhage; and a piece of placenta projecting from the os was removed. This did not stop the bleeding; and therefore, under chloroform, the uterus was explored, the remainder of the placenta removed, and the cavity washed out with carbolic acid. Next day a rigor occurred, and on the sixth day an exudation was to be recognized in the right parametrium, which soon extended behind and to the left of the uterus, and slight cystitis came on. On the twentieth day after removal of the placenta, fresh symptoms appeared, severe pain was felt in the lower abdomen, and there was redness, swelling, and tenderness of the skin over the symphysis. In the left inguinal region were inflamed lymphatic vessels. The inflammation spread; vesication, and then gangrene of the skin took place, an ulcer being left measuring about thirteen centimetres by six. There was also suppuration of

inguinal glands on both sides. The patient recovered after an illness of about thirteen weeks' duration. Dr. Thiede attributes the gangrenous inflammation to septic infection, the skin being predisposed to slough by the pressure and bruising of it necessarily involved in bimanual manipulation of the uterus. We may also mention (points to which Dr. Thiede does not attach much importance) that the patients had been treated, prior to the gangrene, with mercurial inunction, and the application of ice to the hypogastrium. The ice, he says, gave great relief to the pain of the parametritis, so much that when it was removed the patient clamored for its replacement.

Plaster Supports.

Dr. W. T. Browne thus writes in the *Boston M. and S. Jour.*, March 20, 1884:

The object is to produce fixation with a material which shall be easy of application and easy of removal, being cleanly, light, durable, cheap, and ready for use as soon as one is done applying it. This may be attained by the use of plaster of Paris in the following way, for a support of the spine for instance:

Take three, four, or five pieces of plaster gauze as wide as the support is to be, and long enough to go around the body and lap ten or fifteen centimetres each way. Lay these on another piece of the same length and eight or ten centimetres wider, and stitch them all together in the middle of their length, so that the seam shall extend up and down the front of the completed support; rub cosmoline into this seam in as narrow a line as possible. Hold the layers of gauze up to the body, so that the seam shall come over the sternum and the widest layer next the body, and cut out where they come under the arms and in the groins. It is not necessary to be very particular about the cutting, as the edge can be easily turned over the required amount, after the plaster has been applied and before it has set.

The patient, having on the usual thin undershirt that fits well, and without any pads, is suspended in the usual way.

Eight hundred or one thousand grammes of plaster are now mixed with water to the consistency of cream, and while an assistant holds the gauze up to the body, the first layer is brought down smoothly and rubbed with plaster, then the next, and so on till all have been laid and filled with plaster; then turn the edges of the widest layer over the others, thus forming a binding and a smooth edge.

The plaster may be put on with a brush or with the hand; I prefer the hand. It requires about fifteen minutes to apply the plaster, so it should not set quicker than that.

Such a support is cleanly, for the edges being bound are not liable to crumble.

It is much lighter than when put on with rollers, as it does not need to be as thick, owing to plaster all being mixed at once and setting in a uniform mass.

A bandage made in this way is two or three millimetres thick in front, and four or five behind, and will last three or four weeks. If it is wanted to last longer, it may have more gauze and more plaster.

The cost of material is only a few cents, and the plaster will be found to be very thoroughly set by the time the binding has been turned and the surface rubbed smooth.

The plaster should be tested before using, to ascertain how long it requires to set; and, if it requires a few minutes more than by experience it is found to take to apply, it may be mixed a few minutes before required for use.

When it is necessary to remove the support, it may be ripped open along the seam as readily as any seam in cloth.

It requires less experience to apply a bandage in this way, as it is impossible to draw it tighter in one place than another and produce ridges on the inside.

Hepatic Colic—Inflammation of Gall Bladder—Perforation—Peritonitis—Death.

Dr. E. L. Larkins reports this case in the *Peoria Med. Mo.*, September, 1883:

On the morning of August 11, 1883, I was called to see a patient, a boy of delicate constitution, aged about nine years.

The parents gave me the following history: Four days previously the patient was suddenly seized with severe pain in the right hypochondrium, of a paroxysmal character, vomiting at first of the contents of the stomach, and subsequently of thin mucus, streaked with blood. The patient had rigors, followed by fevers of a remittent character. On the second day of illness there appeared, they said, at the inner margin of the right rectus muscle, just below the ribs, a tumor a little larger than a hen's egg, which could be traced upward to the liver. This, they told me, continued to increase in size until some time in the night previous to my being sent for, when it entirely disappeared. Following the disappearance of the tumor, there appeared great prostration with, in a few hours, rapid swelling of the abdomen.

When I arrived I found the patient *in articulo mortis*, body bathed in a cold perspiration, extremities cool, pulse 180, temperature 101, respiration short and irregular, mind clear, and complained of pain when the abdomen was touched. I informed the parents of the near approach of dissolution, my prognosis being verified, as the boy died in about four hours.

The gall bladder must evidently have been perforated, and the contents escaping into the abdominal cavity, set up violent peritonitis, which was speedily fatal.

Rhode Island Medical Society.

At the quarterly meeting held in Providence, March 20, 1884, the following papers were read: "Topical cardiac blistering in the treatment of acute rheumatism," by Dr. Neil O'Donnell Parks. "Prevention and treatment of puerperal fever," by Dr. H. Terry. "Blepharospasm," by Dr. H. G. Miller. "Disease of the bladder, probably malignant," by Dr. Burge. "Impacted intracapsular fracture of the neck of the femur," by Dr. Lloyd Morton. The officers of the society are, Dr. Job Kenyon, President; and Dr. George D. Hersey, Secretary.

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SPECIALISM.

Every once in a while we hear some man most savagely abuse *specialists*, and condemn them and specialism in the most unqualified terms. Now, this is wrong. If a specialist will confine himself within the limits that belong to him, then is he not only not to be condemned, but he must be regarded as a necessity to the proper and complete fulfilment of the healing mission of our profession. But what is their proper sphere? They are aids to the general practitioner. Just as the general of an army has his adjutant-general, and his commissary-general, and his quartermaster-general, and so on, all of whom have each their separate and distinct duties to perform, which are all carried out in the interest of the commanding general, and are designed to enable him to best conduct and manage the whole; so the general practitioner should have his oculist, and his aurist, and his neurologist, and so on, to whom he can refer any patient that may, in his judgment, require these special services, provided the patient has the money to pay for them. Dr. Allbutt, in an address recently delivered in London (*Lancet*, March 15, 1884), thus arraigns the gynecologist. He says that "a neuralgic woman" (he is speaking about abdominal neuroses) is either told that she is hysterical or that it is all uterus. In the first case she is comparatively fortunate, for she is only slighted; in the second case she is entangled in the net of the gynecologist, who finds her uterus, like her nose, is a little on one side, or again like that organ is running a little, or is as flabby as her biceps, so that the unhappy viscus is impaled upon a stem, or perched upon a prop, or is painted with carbolic acid every week in the year, except during the long vacation, when the gynecologist is grouse-shooting, salmon-catching, or leading the fashion in the Upper Engadine. Her mind, thus fastened to a more or less nasty mystery, becomes newly apprehensive and physically introspective, and the morbid chains are riveted more strongly than ever. Arraign the uterus, and you fix in woman the arrow of hypochondria, it may be for life."

Though rather harshly expressed, it must be

conceded that there is much truth in what Dr. Allbutt says. It would be only natural that the specialist, who is confining himself to the diseases of one organ, or one set of organs, should view all diseased conditions from a partial standpoint, while the general practitioner, with a mind trained to general observation, would be much less restricted in his views. The specialists, as adjutants to the physician, are most desirable, nay, indispensable; as separate and distinct practitioners they are dangerous.

THE PATRONS OF QUACKS.

"From a curious fact which has recently come to light at Chaux-de-Fonds, Turgénieff, the great novelist, did not put implicit confidence in the faculty; and, when medical men failed to relieve his sufferings, he sometimes applied to empirics. During the latter years of his life, he appears to have suffered much from a painful spinal complaint, for which he consulted many eminent physicians and tried innumerable remedies. According to *L'Impartial* of Chaux-de-Fonds, the police of that place took proceedings against a *medji*, or quack, whose supposed cures had won him a high reputation with the poor of the neighborhood; and among the man's papers was found a letter from Turgénieff, written at Bongival, near Paris, describing his disease, and asking for a prescription. This fact, if true, proves that the patrons of the secret practitioners of the healing art are not confined to the ignorant and obscure."

So says the *British Medical Journal*, and so eminently true is what it says that the subject admits of some elaboration.

When a very prominent divine was recently asked why it was that quacks and imposters were so very successful, he replied that it was owing to the *gullibility* of the human race. Barnum makes no secret of his success when he admits openly that he is the greatest old humbug of the age; and that by deceiving and fooling the people he has made his unparalleled popularity. In a recent advertisement of a quack medicine in one of our daily papers, we were surprised to see testimonials of merit from men holding the very highest rank in the army and navy of the United States, as well as from others equally distinguished in other professions. We must perforce presume

that these men authorized the use of their names, else the quack would hardly have had the temerity to publish them.

Human nature seems to lean to the mysterious, and will much more readily and cheerfully in many cases pin their faith to quack medicines whereof they know nothing, than to reputable and respectable practitioners.

THE HEALTH OF OUR CHILDREN.

One of our public schools was recently closed by order of the Board of Health, on the ground that it was a nuisance, prejudicial to the health of the children, on account of the filthy condition of its wells and serious defects in its ventilation. We are glad to record this fact, as a stride in the march of hygiene in our midst. A meeting of the school authorities was held to take action in the premises, and as they were about adjourning, another notice from the Board of Health was received. It required that the wells at another school house should be filled up and latrines substituted.

The chairman was greatly incensed at this new notice. "The Board of Health," he said, "has no right to dictate to this Board what it shall do and how it shall do it. We are created by the Legislature of the State of Pennsylvania." The notice was ignored.

We are very sorry to chronicle this latter fact, and we hope the day is not far distant when every city in the country will possess an official or a board of officials who will have the undoubted authority to enforce their sanitary recommendations. The question of public health is a matter of such great importance, that it should be removed far away from the contaminating and dependent influence of politics, and placed in an independent and intelligent position. The time will surely come—and why not hasten its coming?—when the law of the land, that is to say, of every State in the land, will require the examination of all public, yes, and of private buildings, by competent inspectors, upon whom will be conferred the requisite authority to enforce their sanitary admonitions. Let the profession move in this matter,

let our county societies memorialize the legislature on the subject, let the Keystone State inaugurate the sanitary reform, that, once started, will rapidly spread throughout the length and breadth of the land.

THE TRANSATLANTIC MEDICAL SERVICE.

An earnest effort is on foot to reform the condition of the medical service on the transatlantic steam vessels. At present, it is in a most unsatisfactory condition. The pay allowed to surgeons and assistant surgeons is so small that either no competent medical man will accept the position, or, should he do so, will not remain in it for any long time. What inducement is \$50 a month, combined with all the disagreeables of sea life, with no prospect of promotion, and not even a guarantee of permanence, to any capable physician? Yet that is about the maximum which these lines pay.

The result is that there is no stability in the medical service, and that it is usually supplied with young men who want a little change, or to see the incidents of traveling life.

What is needed is increased pay, which will be at least as high as that in the naval service, some certainty of retaining the position, and a proper examination of applicants.

There is a studied attempt on the part of some companies to debase the medical service. We have already called attention to the action of the Red Star Line in putting the surgeons in the second cabin. Probably they will send them to the steerage next!

We call upon our State Medical Societies and the American Medical Association to take action in this matter.

The efforts of Dr. J. A. Irwin (363 5th avenue, New York city) to bring about a reform of the service, should be supported by the profession on both sides of the Atlantic.

ACTION AND REACTION.

The great laws of nature are certainly immutable; with a precision that is marvellous, they cannot be altered one iota; cause and effect, action

and reaction, are ever present in all of nature's workings. To the careful reader of the medical periodicals of to-day, the reaction that always follows action is made clearly manifest. For some years past, and more particularly during the last two, the onward progress of our profession, both from a scientific as well as from a practical point of view, has been very rapid. But now comes the inevitable reaction; many of the fine-spun theories that have been advanced from time to time have been found unable to stand the test of experience, while also the originators in our ranks seem short of scientific breath, and are compelled to halt that they may recover "their wind." We are glad of this, for now we can have the time to carefully look into the true merits of the various plausible theories that scientific physicians have advanced, as well as the bold operations that have been done by the fearless surgeon. Thus we can separate the good from the bad—the wheat from the chaff—and having firmly settled truth on her pedestal, start off for another race of progress, from an even higher vantage ground than before.

LIMITING OUR WATER SUPPLY.

We are very sorry to learn that an effort is being made in this city to prevent what is called the excessive waste of water, and that this retrograde movement is receiving the sanction of some whose influence is very potent. We wish to be understood literally when we say that water cannot be wasted in a city. Of all disinfectants, purifiers, and preservatives of health, water stands pre-eminently in the front rank. Water and soap are two commodities that we cannot afford to dispense with, and of the two, water is by far the most essential. Far from limiting our water supply, it should be increased to an unlimited extent. What may seem to the uninitiated as waste, is not so at all. We grant that were all the people thoroughly acquainted with the dogmas of hygiene, so that they might intelligently use the water with a definite end in view, then could we accomplish much more with one gallon than we can to-day with five; but since this familiarity does not exist, then must we hold that a very

great abundance of water is necessary to accomplish these ends. Give us plenty of water, that we may waste it, if you like the word, and by so doing wash away from us decomposing organic debris that is breeding disease and death. We cannot have too much water. It is impossible.

POLICE SURGEONS.

More than eighteen months ago (August 26, 1882), we called attention, editorially, to the necessity of establishing a system of police surgeons in this city, and it now affords us pleasure to record that our suggestion has become a reality. The Mayor of Philadelphia has appointed a police surgeon (Dr. Morris S. French), who will in turn appoint a corps of assistants, one for each police district in the city, whose duty it will be to respond to all sick calls from each particular station house. It is proposed by the mayor to establish a system of physical examination of all applicants for positions on the police force, and the requirements which Dr. French has formulated are of a sufficiently stringent character to insure to this large city a very efficient police force, which is one of the most essential, and at the same time one of the most neglected features of our various municipal governments.

If our new mayor does nothing else during his administration, he will be entitled to the gratitude of all good citizens for having inaugurated a most praiseworthy and commendable reform in our police department.

NOTES AND COMMENTS.

Gangrenous Enteritis.

Before the Sheffield Medico-Chirurgical Society (*Brit. Med. Jour.*, February 16, 1884), Mr. C. Atkin read a paper on a case of gangrenous enteritis, making some remarks on enterectomy and enterography. The case was as follows: A painter, aged 30, was seized, four weeks before admission into the infirmary, with pain in the abdomen and continuous vomiting. The case was thought to be one of colic, and treated with enemata and purgatives; but no motion or flatus ever passed from him. When first seen at the infirmary, he was extremely emaciated. There was no hernia, nor

had he ever had one; no hardness along the colon or rectum; no stricture to be detected *per anum*. An enema could be distinctly heard with the stethoscope ascending and traversing the colon. A consultation being held, Mr. Favell determined to give the man a chance, however small, of being relieved by operation. Abdominal section was performed, and a loop of bowel was found to be gangrenous. As the man was moribund, it was decided to do no more, and the wound was closed. At the necropsy, next day, the bowels were first carefully examined *in situ*. No internal hernia, band, or twist, was to be found. They were then removed, and carefully examined inch by inch. No hard fæces, diverticula, or stricture, were visible. The heart was healthy; but his arteries were diseased, and the kidney showed commencing granular changes. Mr. Atkin then commented on the rarity of localized death of a loop of bowel arising *de novo*; and, after enumerating various causes, came to the conclusion that it was probably due to the state of the arteries, a branch probably becoming thrombosed. Allusion was made to the unusual duration of the case, and to the equivocal character that the first symptoms must have presented. The question of treatment was then gone into; and, it being assumed that abdominal section would have been performed had the case been seen earlier, the point what to do with the gangrenous bowel was discussed. Summaries of the cases of Kœberlé, Czerny, Schede, Sutton, Meusel, and Prati were read, and the different methods of suturing the bowel mentioned. The author then showed that stricture of the bowel never resulted, because union took place by the first intention; that the spur formed by the involution of the mucous coat was no impediment to the passage of fæcal contents; and that there was no danger of the sutures being burst open by flatus. The special clamps invented by Mr. Treves and Mr. Stanmore Bishop were mentioned, but were stated to be unnecessary, as several cases had done well without them, notably the recent one of Mr. Banks.

The Salicylates in Diphtheria.

The use of the salicylates is becoming very extended, for now Dr. C. R. Illingworth writes to the *Lancet*, February 16, 1884, recommending them in pneumonia and diphtheria. He says:

Some months ago I proposed the use of the salicylates in pneumonia, and at the same time I gave a very favorable opinion of their action. I wish now, through the medium of your valuable journal, not only to advocate their use in that

disease if possible more strongly than ever, but also to propose that they should be tried in diphtheria and true croup. I suggested this in a very cursory manner in the *British Medical Journal* last year ("Omega," June 23), but have never had an opportunity of testing their effects practically, although the theory I have formed as to the action of salicylates in general would seem to indicate the advisability of employing them.

In pneumonia I prescribe five- to ten-grain doses of the salicylate of soda every two hours, with twenty-minim doses of the aromatic spirits of ammonia for an adult. If the pulse should be very rapid and feeble, I add five minim doses of digitalis, and if there should be any delirium, ten-grain doses of the bromide of potassium. In children an acute congestion of the lungs is very rapidly thrown off with three-grain doses of the salicylate and five minims of ammonia every two hours. The compound spirits of ammonia is well known to have the property of reducing the fibrin-forming elements of the blood; but I am of opinion that the salicylate of soda prevents the formation of fibrin altogether, and in this way it may be said to be no more a specific for rheumatic fever than for pneumonia or diphtheria, or, indeed, for any other disease which is associated with or accompanied by the formation of fibrin. Whether it acts by altering the composition of the corpuscles, so as to prevent the formation of fibrinoplastic material, or upon the plasma, to prevent the development of fibrinogen, I am not prepared to say; but certain it is that there is the production by its use of a state of greater liquidity of the blood than ordinarily; and it is on this account that I think the mixture I have mentioned above will prove useful in the treatment of diphtheria and true croup, although in false or congestive croup I am inclined to place more confidence in astringents, such as steel and sulphuric acid.

Hydrargyri Tannicum Oxydulatum.

The *Med. News*, quoting from a foreign exchange, tells us that this preparation has been used in syphilis by Dr. Sigmund Lustgarten:

This salt is the tannate of the protoxide of mercury (hydrargyri tannicum oxydulatum), which contains fifty per cent. of mercury. It is a dull green powder, without odor or taste, and is only soluble when decomposed. Hydrochloric acid makes no sensible impression upon it, but very dilute alkalies, ammonia, solution of caustic potash, and the alkaline carbonates, reduce it in a short time to a sort of magna composed of very

small particles of metallic mercury. They are so minute that the greater part of them present, under the microscope, the phenomenon known as molecular movement. This process of reduction is produced under the influence of the alkaline reaction of the intestinal juices; whence it may be asked, if the absorption of the particles of mercury is produced in the same way in the intestines as on the skin by mercurial friction? The determination of this question has occupied the attention of Lustgarten for some time. He has now been able to demonstrate the rapidity of the absorption of mercury into the blood, having found mercury in the urine in twenty-four hours after its administration.

This new drug has been prescribed in two or three doses of gr. jss. every day, but in spite of this seemingly large dose no troubles of the stomach and bowels have been observed, nor the troubles usually seen when the ordinary mercurial preparations—calomel or corrosive sublimate—are administered; nor has stomatitis or salivation been observed, although the very large dose of grs. xc. has been given. On the contrary, in ten cases treated, up to this time, comprising every period of syphilis, and especially cases of relapse of a very rebellious nature, as syphilides with small papules and pustular syphilides, there was so rapid a regression of the lesions that Lustgarten does not hesitate to place the new drug by the side of the best mercurial preparations hitherto employed.

Spasmodic Contraction of Uterus or Placenta.

Dr. W. L'Hérenx Blenkarne reports this case in the *Brit. Med. Jour.*, March 1, 1884:

A primipara, aged about 30, had a fairly good time, the child being born naturally (but a dose or two of ergot having been given). On my finding that slight traction on the cord, telling the patient to blow on the back of her hand, and other simple means, failed to dislodge the placenta, I introduced my hand gradually into the vagina, and found that (apparently) the whole of the uterus was spasmodically contracted on the placenta, the os being somewhat contracted as well; so that I could only get two or three of my fingers into the cavity. There was no hæmorrhage, and the pulse was 60°. I did not, however, deem it advisable to wait very long; chloroform was therefore given by my partner, and the patient partially put under its influence. I was now enabled to introduce the whole of my hand into the uterus, and then found that the placenta was rotten and broken down; but it was not a

herent anywhere. There were still irregular contractions of the uterus, which caused me some difficulty in passing the whole of the placenta; but by degrees I did so, as I was anxious to remove it all without re-introducing my hand; this I effected at last, and thus saved the poor woman the discomfort of my removing it piecemeal. She made an excellent recovery, and at no time during the whole of the operation, or afterwards, did the pulse rise above its original standard of 60. It passed through my mind whether the ergot was accountable for this spasmodic contraction; but I am inclined to think that it was merely an idiosyncrasy of the patient, as I have repeatedly used ergot in my midwifery practice, and have never witnessed a similar untoward result.

Poisoning by Aconite.

Dr. Herbert W. Seager reports this case in the *Brit. Med. Jour.*, December 1, 1883:

One or two points in a case of poisoning by aconite may be of general interest. I saw the case for a neighboring practitioner, on November 11, about an hour after the poison had been taken. The patient was an hysterical woman, aged about 40. She had taken about three drachms of the linimentum aconiti *B. P.* When I first saw her, she was much prostrated; she did not answer questions, but was able to tell me that she had taken the poison herself, and to utter some short prayers. There were frequent general convulsions, rather violent. The face was much congested; the lips were red; the pupils much dilated; the sclerotic injected; the iris somewhat irregular in the external outline. The pulse was full, and somewhat irregular. Respiration was blowing, and rather rapid. A slimy tenacious mucus was expelled from the lips with almost every expiration. I gave her an emetic; but I believe there was no power of swallowing. The convulsions were easily repressed by a wet towel over the face and head; but this seemed to cause much depression. There was entire loss of sensibility of the skin. About a quarter of an hour after I saw her, the surface of the body became suddenly cold; the respiration and pulse ceased; but she was revived by a hot poultice on the epigastrium. The convulsions became less frequent as the poison gained ground; and she was speechless for about twenty minutes before her death, which occurred about an hour and three-quarters after the poison had been taken. At no time was the face blanched, or the lips bloodless; on the contrary, the lips became dark blue after death. A slight tremor of the lower lip was noticeable some moments after pulse

and respiration ceased. Artificial respiration was ineffectual.

The points to which I wish to call attention are: the convulsions; the inability to swallow; the dilatation of the pupils; the congestion of the face; the insensibility of the skin; and the reviving effect of the poultice over the epigastrium.

Inoculation of Tuberculosis.

Since the great interest which Koch's discoveries have thrown about this subject, all that pertains to its infectious or contagious properties must be read with interest. The Paris correspondent of the *British Medical Journal* tells us that at a recent meeting of the Académie de Médecine, M. Verneuil related the following history: In July, 1877, a house surgeon (interne) at the St. Eugénie Hospital, who performed all the post mortem examinations, one day noticed a papule at the base of the nail of his third finger. The apex presented a white spot, and a few drops of pus escaped from it. It was frequently cauterized, but the phalanges became attacked, and a cold abscess spread over the back of the hand. After three years' treatment, having failed to produce any improvement, M. Verneuil amputated the finger. The house surgeon was believed to be cured, and practiced in the provinces. Quite recently he has been again attacked by cold abscesses in the lumbar region, causing intense pain; during violent attacks of pain, the arms exhibit clonic convulsive movements. M. Verneuil has operated a second time. He is convinced that his patient became inoculated with tuberculosis when performing a necropsy. A similar misfortune happened to Laënnec. One day, when operating on a tuberculous patient, he slightly cut himself with a saw. A swelling appeared on the wounded part. Laënnec cauterized it with antimony-chloride. The swelling disappeared, but twenty years subsequently he died from tuberculosis.

A Foreign Body in the Bladder.

As aids to practice, all unusual cases are worthy of record, for by remembering them, we are oftentimes enabled to solve otherwise enigmatical cases. Such cases as the following, which Dr. Robert Storrs reports in the *Brit. Med. Jour.*, January 26, 1884, are both unusual and interesting:

"On January 9, 1884, I received a message to see Mrs. C., aged 64, the wife of a tradesman, and a very fairly intelligent woman. She was the mother of a large family, the eldest being more than thirty years of age. She was seen the same evening by Dr. McConnell, who is associated with

me in my practice. She presented to him all the usual symptoms of calculus. The following day she was seen by us together, when, with the sound, we clearly detected a foreign body in the bladder. We proceeded to dilate the urethra; and, in passing the finger through the urethra into the bladder, we detected a substance of a metallic nature. This we were able to extract by means of a long narrow pair of forceps passed by the side of the finger. It proved to be a hairpin of the ordinary size. This operation was followed by little or no incontinence of urine.

The chief interest in the case was how the hairpin got into the bladder, and the length of time it had in all probability been there. She appeared to have not the slightest knowledge as to how this entered her bladder, but she tells us that she has been conscious of the presence of something there since before the birth of her first child, more than thirty years ago.

Gangrene of Arm Following Injury to Thumb : Death.

Dr. Studdert, in the *Brit. Med. Jour.*, December, 1883, records the case of a man, aged fifty-three, who played a game of bowls, and on the following morning noticed a small blister at the extremity of the right thumb, which, he thought, must have been occasioned in some way during the progress of the game. Two days after the injury he consulted Dr. Studdert. There was then a small punctured wound at the top of the thumb, from which oozed an ichorous discharge. There was no inflammation of the arm, nor any constitutional disturbance. On the fourth day the patient felt ill, and spent a sleepless night. On the fifth day the arm became enormously œdematous, and there was severe pain. The temperature was 101.8° F. Free incisions were made in the arm, after which the limb went down; the temperature fell to 99°, and all pain had ceased. On the sixth day the swelling had returned somewhat, and by evening the limb had become gangrenous. Amputation at the shoulder-joint was decided against, and the patient died during the night.

A New Method of Removing Nasal Polypi.

In the *Canada Medical Record*, February, 1884, Dr. William Ralph Bell says :

"I take the liberty of bringing the mode of treatment before the notice of your readers, which I have practiced with the very best results in several cases. It obviates any trouble from hemorrhage, which is frequently the case when the forceps or hook is used; it is painless and very

simple. I get my patient to blow strongly through the affected nostril, closing the other with his finger. The polypus will be brought down so that it can be easily seen through the external nares; then with my hypodermic syringe charged with a solution of tannic acid in water (of the strength of twenty grains to the fluid drachm), I pierce the polypus with the needle, and inject ten, fifteen, or twenty minims of solution, according to size of tumor. In a few days the polypus shrivels and dries up (tanned); it comes away without any trouble or pain, and looks like a clot of dry blood, my patients usually removing it by blowing the nose or by their fingers. In only one case, that of an old lady, had I occasion to remove it myself, and in her case I think she was afraid to do so, for when I seized it with dressing forceps, I required to make no traction to bring it away."

Transplantation of Healthy Skin in Lupus.

Hahn (*Monatsh. für Prakt. Derm.*, No. 9, 1883,) has scraped out lupus-tissue and grafted transplanted healthy skin to the fresh wound in five cases with good results. The patients were anesthetized, and, after the scraping was finished and the bleeding arrested (which sometimes did not occur until after several hours), the whole wound was covered by portions of skin about half a centimètre long and a quarter centimètre broad, the portions consisting only of cutis and epidermis. Under iodoform bandage, complete union of the transplanted portions occurred mostly in from five to eight days. A year had elapsed since the treatment of the first case, the cure being so far permanent, and no relapse having occurred.

Hospital Entertainments.

A strange sort of festivity, says *Truth*, took place recently at the Hospital St. Louis, at Paris. A comic opera, written and composed by the young surgeons attached to the establishment, was performed for the amusement of the patients. Fifty years ago, Charles Fourier, the celebrated philosopher, wrote: "One day medical science will endeavor to overcome the sufferings of patients by amusing their minds; hospitals will be filled with flowers, and music and plays will be performed there." And yet it was currently reported that Fourier was mad.

Bromine in Diphtheria.

Bromine is strongly recommended by Dr. Schiltz (*Pharm. Central.*, February 14, p. 71) in the treatment of diphtheria. One form in which he uses it

is as a solution prepared thus: chlorine water, 30 parts; distilled water, 150 parts; and bromide of potassium, 3 parts. The bromine separated by the chlorine from the bromide of potassium, remains dissolved in an excess of the latter, like iodine in potassium iodide. The chlorine water of the German Pharmacopœia is not so strong as that of the British Pharmacopœia.

Treatment of Chronic Adenitis.

An exchange publishes the following formulæ:

1. Lard, 30 grammes (say $\frac{3}{4}$); ammonium chloride, 5 grammes ($\frac{3}{4}$ ss.); and camphor, 2 grammes ($\frac{3}{4}$ ss.). Mix. To be applied night and morning.

2. Potassium iodide, 1 gramme (gr. 15); distilled water, 5 grammes ($\frac{3}{4}$ iss); extract of hemlock, 2 grammes ($\frac{3}{4}$ ss.); lard, or vaseline, 30 grammes ($\frac{3}{4}$ j.). Mix.

3. Calomel and acetate of lead, of each 3 grammes (gr. 45); lard, 20 grammes ($\frac{3}{4}$ v.); camphor, 5 decigrammes (gr. 8). Mix.

CORRESPONDENCE.

Dr. Rezin Thompson's Formula.

EDS. MED. AND SURG. REPORTER:

Here is Rezin Thompson's formulary:

R. Syr. rhei, $\frac{3}{4}$ iv.; piperin, sodæ bicarb., $\frac{1}{2}$ aa gr. x.; olei sassafras, gtt. xx. Rub all together in a mortar and add saturated tinct. of valerian, $\frac{3}{4}$ ij.; mix and rub again. Sig.: For an adult a teaspoonful every two hours until the disease (typhoid) is checked. Or thus: Rhei pulv., $\frac{3}{4}$ ss.; piperin, zinci valerianatis, ext. valerian, soda bicarb., of each grs. x; ol. sassafras, gtt. xxx.; pulv. acacia, q. s.; misce et div. in. pil. no. xxx. Sig.: One every two hours, as with the first.

He claimed that the above would actually abort typhoid fever, if begun with in time. I have never tried it. He believed that the valerian played an important part.

Liberty, Mo.

B. F. RECORDS, M D.

Displacement of Colon.

EDS. MED. AND SURG. REPORTER:—

By reading the statement in the REPORTER not long since, that displacement either of the ascending or descending colon is practically impossible, I am prompted to report to you a case in which the ascending colon was displaced.

The autopsy was made with the object of ascertaining the origin of fatal hemorrhage. This was found to be from a branch of the gastric, opening into an ulcer in the posterior wall of the stomach, about three-quarters of an inch from the lesser curvature at its centre.

From the cæcum the colon extended in a curve, its convexity towards the left inguinal region to

the splenic flexure. The stomach lay close to the colon, parallel with it in general direction, its pyloric end being very low, and its lesser curvature apparently stretched. The great omentum was very small, not sufficing to cover the colon.

I am sorry I cannot give you a good description of the conditions found, the examination having been hurriedly made, with no other object but the one mentioned.

G. F. JEWETT, M. D.

Hilliard, O., March 24.

Croton-Chloral Hydrate in Whooping-cough.

EDS. MED. AND SURG. REPORTER:—

I have been using this remedy for the past eight years, in the treatment of whooping-cough, with the most gratifying results. In ninety-five per cent. of the cases in which I have used it, the disease was cured in from six to twelve days. During the past five years we have had two epidemics of pertussis in this town, which gave me ample opportunity of testing the merits of croton-chloral in persons of almost all ages; from infants under eight months, to persons of the age of fifty-five years. I found it act equally well, no matter what the age was. It must be given in full doses, properly dissolved, and every three hours. My method of prescribing it is as follows: For a child from eight to ten years of age:

R. Croton-chloral hyd., $\frac{3}{4}$ iiss.
Aque bullientis ad., $\frac{3}{4}$ viij.

M. Sig.— $\frac{3}{4}$ ss every three hours, night and day.

The above dose, of course, should be increased or lessened, according to the strength and age of the patient. I do not use anything to cover the taste of the remedy, nor do I use anything to render it more soluble, experience having taught me that the best results were obtained when the remedy was given as above described. Croton-chloral has proved as sure a specific in my hands, in whooping-cough, as quinine has in intermittents. Let it be constantly borne in mind, that to get the beneficial effects of this drug, it must be given in full doses, properly dissolved, and every three hours.

V. H. MOORE, M. D.,

M. C. P. S., Ont.

Brockville, Ont., Canada.

Answers to "Medica."

EDS. MED. AND SURG. REPORTER:—

Under the head of "Gynecological Queries," in No. 8 (February 23), page 256, "Medica" inquires for suggestions in a case. Having had a patient for the last year and a half of somewhat similar character, who has given me much trouble and thrown defiance into my face worse than most anything I have ever found, I sent her into the country to free her from all care, when her friends went into the woods and obtained the root of the cypripedium, or moccasin plant, which she used in an infusion, and began to feel the good effects immediately. This was last fall. She has now come home quite another woman, but says she cannot get along without her remedy.

I never like to give up, but I must own that this simple remedy, which I have not used for thirty years, has discounted my pharmacopœia, gynecological applications, time, and everything

else. I rarely get a case like this, which gives me such a good chance to try my skill, and that for a considerable period, till I am at my wits' end. Yet it is evident enough that this simple little plant does hold some control over her nerves, which keeps up her appetite, keeps off headache and the aches through her body, regulates her turns, and controls the uterine conditions beyond anything I could suggest. She has had one child, and now has "ulceration," with leucorrhœa, all of which is thoroughly rebellious. I have seen only two or three cases of such "ulceration," and hope to see no more. If I do, I shall use cypridium, to see what it will do. I am persuaded that the "ulceration" and leucorrhœa still exist in the case, though I have not examined her for many months. So bad was it, or the irritation from it, that the woman was sure to be sick if she attempted even a short walk. This has passed away, so that she is on her feet a great deal, doing her work and taking long walks frequently.

So far as I can judge, this great benefit to her is all from the cypridium. When she first got into the country, she continued to run down for two weeks, till this remedy was taken; and now, whenever she leaves it off she begins to lapse in her feelings. Practically cured with the remedy, she may not be cured without it, and so have to take it—as Dr. Cole said they do tobacco who use it—"eternally." However, I am glad for something which helps my case so much more than anything else which I could find. All external treatment has been abandoned since last summer.

E. CHENERY, M. D.

Boston, Mass.

NEWS AND MISCELLANY.

Kentucky State Sanitary Council,

Held at Bardstown, Nelson county, March 26 and 27, 1884, under the auspices of the State Board of Health.

The Kentucky State Sanitary Council held its third semi-annual session at Bardstown, Nelson county, on Wednesday and Thursday, March 26 and 27.

The Council was called to order for the first session at 7 p. m., at the county court house, by Dr. J. A. Dixon, of Burksville.

Dr. Alexander Crawford, in behalf of the resident physicians and citizens of Nelson county, delivered an address of welcome, which was responded to in behalf of the visiting delegates by the President, Dr. J. A. Dixon, who spoke as follows:

"Ladies and Gentlemen of Bardstown and Nelson County: The fame of Kentucky hospitality is world-wide, and the culture, refinement, and generosity of the citizens of Nelson county is proverbial. Your welcome this evening does not detract from the well-earned reputation of which all Kentuckians love to boast. We fully appreciate the welcome we meet at your hands, and enter upon the proceedings of this council with our zeal and enthusiasm increased by the interest manifested in this work of sanitary regulation by your community.

"Public health is public wealth, and the first great duty of the state is to look to the health of the people. The importance of the subject is greater than all others, because it embraces all others. Political economy estimates the money value of human life, and by these estimates we are able to calculate the loss to society, the state, and the nation, by the untimely deaths that occur from preventable causes. Small-pox, yellow fever, or any other contagious or infectious disease prevailing in a community, causes inestimable loss to the commercial interests, as well as greatly increased individual expense. The loss to Philadelphia in 1871 and 1872 from the outbreak and epidemic of small-pox, which resulted in the reporting of 23,000 cases, has been estimated at \$28,000,000. This could have been prevented by efficient sanitary organization. Yet the ignorant say no good can come of these sanitary organizations.

"The message of Gov. Knott contained not one word in reference to the health of the people over whom he rules. All the avocations of life at the present time have their organizations, and to-day political conventions are being held to give shape to our national affairs. The workmen demand through their organizations redress of their real or fancied wrongs. Our best men are organizing in order to work out the great problem of public education, and we, as public-spirited citizens, meet to discuss ways and means to alleviate the pain and prevent the diseases to which our fellow-men are exposed. The time has come when we must protect our homes and avoid the positive disgrace of being sick. This is what we hope to accomplish.

"In closing these very brief remarks, allow me to hope that when disease and pestilence stalk abroad in the land, your beautiful city and good people shall escape, because you have the blood of purity sprinkled upon your door-posts."

The first regular paper of the session was read by Dr. Dudley S. Reynolds, of Louisville, on the subject of "Foods as Causes of Certain Classes of Disease."

"As an article of diet," said he, "sugar is classed high in the list of force-producing agents. It is not as widely known as it should be that the term sugar in this connection is intended to indicate saccharose, or cane sugar, which has been freed from glucose, naturally present in it in its crude state, or in the expressed juice of the cane. It is unnecessary to go into the details of the process for separating the glucose from the crystallizable saccharose, but the latter and not the former is valuable as an article of diet. The glucose naturally present in the juice of the cane is a comparatively harmless form of that substance. Likewise the expressed juice of what is commonly called sorghum. Either of these, however, on being subjected to a high temperature, which is sometimes done to improve the color, loses greatly in value, and then becomes noxious to the system. Even saccharose in its purest form, mixed with water, may be converted into glucose of a highly irritating character at a temperature of 320° F. When saccharose, in combination with free acids, is heated to 212° F., new compounds are formed called saccharides. Some of these have the constitution of ethers, whilst a combination of fruit

or vegetable acids with saccharose converts the latter into glucose at a much lower temperature. Concentrated acids, such as are found in the stems of the so-called pie plant, decompose saccharose even without the aid of heat.

"Laevulose is the name given to the sugar of fruits and of honey. In our ripe fruits this is transformed into glucose. In cooking fruits, the laevulose and the fluid acids combine to form powerful ferments, which resist the action of the gastric juice, and which are composed of very fine cells that find their way along with the food into general circulation. As soon as they enter the blood-current, the white blood-cells begin to exhibit abnormal activity of movement. Presently, the lymph-channels are observed to be unduly full. In time, the lymph-glands enlarge; later, the lymph-channels in mucous membranes, especially the naso-pharyngeal, become so engorged as to rupture, and exudation of lymph begins. When this occurs in the nasal or pharyngeal membrane, the patient considers he has catarrh; consults a physician, who tells him it is due to a series of colds he has contracted; and he is treated by all the various means in popular use for the relief of an imaginary bad cold. Of course the patient never gets better in consequence of the treatment, and he is fortunate if he is not made worse. Vegetarians who are gradually led into the habit of eating cooked fruits, finally abandon all other diet. This is attended by progressively increasing prostration and engorgement of the lymph-channels and enlargement of the lymph-glands, including the tonsils.

"It has been so often observed that the children of the poor enjoy better health than those of well-to-do people, that it has been often advised by high medical authority that it were better children should cultivate acquaintance with the pigs than to remain too much indoors. It must not be supposed for one moment, however, that friendly relations with the pigs has anything to do with the superior health of the laboring man's children. Observant people know the diet of the laboring man's family is necessarily plain and simple. In the country, the working man can afford nothing better than milk and butter, plain meats and gravies, and common vegetables. Upon this diet his children fatten and grow, while the children of those who can afford candy, preserves, pies, and fruit sauces, suffer glandular enlargements and all those symptoms which attend the so-called strumous diathesis."

(To be continued.)

State Medical Society of Arkansas.

The ninth annual session will be held at Little Rock, on Wednesday, April 30th, Thursday, May 1st, and Friday, May 2d, 1884, commencing at 10 a. m. on Wednesday.

The members are earnestly urged to be present, and to induce others to join in the work of advancing legitimate medicine.

Each county or municipal society shall be entitled to one delegate for every five members, and one for a fraction over five.

"The several committees shall report annually, through their chairmen respectively, upon the

specific subjects to which they have been appointed. It shall be the duty of each committee to make a full and complete report to the society of all matters, business, etc., that properly comes before or presents itself to them upon each particular branch or section." Art. ix, Sec. 2, Constitution.

The subjoined are the committees to report at the meeting:

Committee on Medical Education: G. W. Hudson, chairman, Camden, Ark.; M. C. Weaver, S. M. Carrigan, J. R. Brewer, R. B. King, A. J. Pulliam, J. J. Robertson, L. Kirbey, E. A. Baxter.

Committee on Practice of Medicine: T. D. Nichols, chairman, Paris, Ark.; D. H. Stayton, J. F. Blackburn, T. B. Hodges, C. L. Kirksey, L. Holmes, A. J. Brewer, J. A. Dibrell, sr., W. W. Bailey, J. W. Pinson, D. S. Williams.

Committee on Surgery: J. E. Bennett, chairman, Fort Smith, Ark.; J. R. Dale, W. B. Lawrence, A. A. Horner, D. A. Linthicum, J. P. Mitchell, J. M. Jelks, W. M. Lawrence, T. W. Hurley.

Committee on Gynecology: J. T. Jelks, chairman, Hot Springs, Ark.; H. H. Turner, L. R. Stark, D. C. Ewing, W. A. Sayle, J. B. Cummings, D. Christian, J. G. Eberle, R. S. Wallis.

Committee on Medical Legislation: F. G. McGavock, chairman, McGavock, Ark.; J. H. Southall, G. B. Malone, L. E. Bennett, W. J. Watkins, R. N. Ross, D. C. Carroll, S. L. Vaughan, J. B. Thompson.

Committee on Necrology: Isaac Fulsom, chairman; D. S. Mills, S. W. Allen, C. E. Nash, R. C. Wallis, R. M. Wilson, T. M. Pinson, J. W. Hayes, J. D. Jordan.

Board of Visitors to the Medical Department of the Arkansas Industrial University: Z. Orto, chairman; W. W. Hipolite, J. C. Wallis, J. E. Bennett, A. G. Henderson.

Committee on State Medicine: R. C. Pruitt, chairman, Osceola, Ark.

Special Committees on County and Municipal Societies: L. P. Gibson, chairman.

It is especially urged that each chairman will exert himself to have a full and complete report from the respective committees; and a paper by any member on the science of medicine and surgery, or its co-ordinate branches, will add greatly to the interest of the meeting. Any member who may desire to present a paper, will confer a favor by sending immediately the title of the same to the Secretary, so that a full programme may be prepared and sent to the members at least two weeks before the meeting, thus enabling them to prepare for the work that is to be done.

Secretaries of local societies are requested to forward as soon as appointed a list of the delegates. Arrangements will be made by which reduced rates can be obtained by all who may attend the meeting. Hence, those who intend to be present, whether already members or not, will please notify the Secretary at once, so that a certificate may be forwarded them in order to obtain the reduction.

L. P. GIBSON, M. D., Secretary,
Little Rock, Arkansas.

Weston's Walk.

We noted some time since the great feat of pedestrianism that Weston had undertaken in

England. On Saturday, March 15, he completed his walk, amid the enthusiastic applause of a crowded and representative assembly of Englishmen and Americans. The stage was occupied by an influential company, among whom were at least a score of medical men, and an equal number of clergymen. During the last week, Weston walked regularly every day from 7 in the morning till half-past 9 at night, with an interval of rest from 5 p. m. till 7.30 p. m. Notwithstanding the loss of sleep during the last two nights, from the excitement on approaching the close of his undertaking, during the week Weston was quite free from the drowsiness which had been so overpowering nearly every morning for the first three-quarters of his tour. He completed 45 years of age with the termination of his walk, when he was found to weigh 129 pounds, a loss of exactly 8 pounds since he started from London four months before. A careful examination proved him to be in excellent health, and quite fit to set out on a task of equal magnitude the following day. So healthy and vigorous was he, mentally and physically, though the last but one mile had been the fastest of any, having been done in 9 min. 17 sec., that, after the presentation of addresses of congratulation from the Councils of the Society for the Study and Cure of Inebriety, and the Medical Temperance Association, and a special vote of thanks spoken to by Dr. Hare, President of the Metropolitan Counties Branch of the British Medical Association, Weston made a long and spirited reply. The medical framer of the conditions of the walk testified that all these conditions had been honorably observed, and that, on several occasions, more than the stipulated daily distance of 50 miles had been covered. Few walks have ever been begun, carried on, and ended under greater difficulties. The sore on the pedestrian's heel, which was a continual source of irritation for half the time, would have prevented most men from walking five miles a day; while Weston, from repeated pecuniary disappointments, was weighted with the depression of spirits consequent on a regularly increasing deficit, amounting at last to about \$3500. To these must be added the fact that, contrary to medical remonstrance, he started while out of condition, and suffering from acute catarrh. Weston was accompanied throughout by reliable judges and referees, and the whole journey was done in the public eye, so that there can be no doubt as to the accuracy of the record. The feat thus successfully accomplished is unique. Endowed with no remarkable muscular power, Weston has owed his success in great part to the mode of living he adopted, the chief feature of which was total abstinence from all intoxicating drinks. Whatever may be attempted and executed in future, this remarkable and original experiment has demonstrated that a resort to intoxicating stimulants is not essential to the accomplishment of severe and long-continued bodily exertion. We recognize, with peculiar pleasure, the constant support which Weston has received, during his performance, from the medical profession.

—The bill to regulate medical practice in Maryland has been killed, the *Med. Record*, April 5, 1884, tells us.

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service, January 1, 1884, to March 31, 1884.

Fessenden, C. S. D., surgeon. To proceed to Cairo, Illinois, and Memphis, Tennessee, as inspector, March 5, 1884.

Purviance, George, surgeon. Granted leave of absence for thirty days, February 16, 1884.

Smith, Henry, surgeon. To rejoin his station at Norfolk, Virginia, March 7, 1884.

Irvin, Fairfax, passed assistant surgeon. Relieved from duty at Norfolk, Virginia; to assume charge of Cape Charles Quarantine Station, March 7, 1884.

Carmichael, D. A., assistant surgeon. To report to Surgeon Purviance for examination for promotion, March 5, 1884.

Armstrong, S. T., assistant surgeon. To report to Surgeon Fessenden for examination for promotion, March 5, 1884.

Bennett, P. H., assistant surgeon. Leave of absence extended ten days, January 18, 1884.

Ames, R. P. M., assistant surgeon. Detailed for temporary duty on relief boat, Ohio River flood sufferers, February 16 and March 1, 1884.

Devan, S. C., assistant surgeon. Upon expiration of leave of absence to proceed to St. Louis, Missouri, for temporary duty, February 6, 1884.

Kalloch, P. C., assistant surgeon. To proceed to Charleston, South Carolina, for temporary duty, February 1, 1884.

Bevan, A. D., assistant surgeon. Granted leave of absence for seven days, March 13, 1884.

Wasdin, Eugene, assistant surgeon. Granted leave of absence for fifteen days, March 4, 1884.

Battle, K. P., assistant surgeon. To proceed to New York, N. Y., for temporary duty, February 4, 1884.

RESIGNATION.

Cooke, H. B., passed assistant surgeon. Resignation accepted by the Secretary of the Treasury, to take effect February 5, 1884, January 31, 1884.

APPOINTMENT.

Battle, Kemp P., M. D., of North Carolina, having passed the examination required by the Regulations, was appointed an assistant surgeon by the Secretary of the Treasury, February 2, 1884.

PROMOTIONS.

Carmichael, D. A., passed assistant surgeon. Promoted and appointed passed assistant surgeon by the Secretary of the Treasury, from March 1, 1884, March 18, 1884.

Armstrong, S. T., passed assistant surgeon. Promoted and appointed passed assistant surgeon by the Secretary of the Treasury, from April 1, 1884, March 28, 1884.

Value of Ingenious Splints.

Mr. Hutchinson, of London, said in a recent lecture, that as a commentary on the futility of inventing complicated splints and apparatus for fixing fractured limbs, none of which have ever received general approval, he might refer to an ingenious instrument devised by Dr. Gordon, of Belfast, after long-continued anatomical study of Colles' fractures. This, which was intended for

general use among surgeons, is figured, says Mr. Hutchinson, in a text-book by a leading surgeon, *upside down*; and assuming from this that even the author of the work is practically unacquainted with the splint, although he writes about it, what chance is there of its ever being universally adopted?

Not only Colles', but all fractures, are most successfully treated by extension, which can readily be applied through the agency of a simple straight splint. Very thick pads should be fitted to the splint, and in ordering from instrument-makers it is necessary to insist on this especially, particularly with regard to splints for treatment of fractured femur. Finally, on this subject of splints, Mr. Hutchinson declared that he had seen many more instances of bad union follow the use of modern improved apparatus, than ever were witnessed under the old plan of treatment of fractures by the straight splint.

Medico-Chirurgical College.

The third annual commencement of the Medico-Chirurgical College was held April 2, at Association Hall. Choice selections of music were given by Professor Fehling's orchestra.

The members of the Faculty and the graduates occupied seats upon the platform, clad in college caps and gowns. The exercises were opened by Rev. Wayland Hoyt, D. D., who made an impressive prayer, which was followed by an appropriate piece of music. Professor George P. Oliver, A. M., M. D., the President of the Faculty, then conferred the degree of Doctor in Medicine upon the following-named graduates:

John W. Hoskinson, Albert Kulb, and Edward F. Manger, all of Pennsylvania, and Dr. Constantine de Navosselsky, of Russia. The first and last-named were awarded prizes by Professor Abraham S. Gerhard.

Then followed an address by Professor George E. Stubbs, and the valedictory address by J. W. Hoskinson. The benediction was pronounced by Rev. Charles G. Fisher. At the conclusion of the exercises the floral offerings from friends were presented to the graduates.

Fresh Paint.

In the *Lancet* we read: The current belief among householders that the smell of fresh lead paint is noxious is founded on pretty general experience, but is opposed by the belief, equally current among chemists, that lead compounds are not volatile. A fact recently brought to our notice seems to support the domestic theory. The basis of the useful and popular luminous paint is known to be sulphide of calcium. Now, this compound, when unprotected by varnish, glass, or some other impervious substance, is slowly acted on by the acids of the air, and sulphuretted hydrogen is evolved, which blackens lead paint. This is well known, and can easily be avoided by proper protection of the paint. But the curious thing is that unprotected luminous paint is found to be perceptibly blackened by the fumes from fresh lead paint. There seems to be only one possible explanation of this—namely,

that a surface freshly covered with lead paint does actually emit some volatile compound of lead. We believe that many physicians could confirm this view from their own observations in regard to newly painted houses.

Medical Supply and Demand.

An exchange says statistics show that among 1,000 doctors the number of deaths annually ranges between 15 and 25. At this rate the number of deaths annually among the 90,000 medical men of this country would be on an average 1,800. Among the 14,000 physicians of Austro-Hungary, the annual death-rate is said to be about 320. If the same ratio existed in this country, the number of deaths annually would be slightly over 2,000. Probably the actual figure is not far from 1,800. On the other hand, the number of medical graduates in 1882-3 was 3,979, or nearly 4,000, and more than double the estimated number of deaths. Account must be taken of the number of physicians who annually retire from practice, and on the other hand of the number of graduates who never enter the practice of medicine. The annual increase of population is probably over a million.

The Association of American Medical Editors.

The annual meeting of the Association of American Medical Editors will be held in Washington, May the 5th, at 8 p. m., in Medical Hall, southeast corner of Sixth and F streets.

The annual address will be delivered by President Leartus Connor, M. D., on "The American Medical Journal of the Future, as Indicated by the History of American Medical Journals in the Past."

Dr. N. S. Davis will open the discussion on "How Far Can Legislation Aid in Elevating the Standard of Medical Education in this Country?" in which Dr. A. B. Palmer, Dr. Henry O. Marcy, Dr. L. S. McMurtry, Dr. C. H. Hughes, Dr. Frank Woodbury, Dr. William Brodie, Dr. A. N. Bell, Dr. William B. Atkinson, Dr. W. C. Wile, Dr. W. R. D. Blackwood, Dr. Henry Leffmann, and Dr. Deering J. Roberts will take part.

Philadelphia County Medical Society—A Correction.

Our contemporary the *New York Medical Record*, in its issue of April 5, says:

"At a largely attended meeting of the Philadelphia County Medical Society, April 2, a proposed amendment to the constitution, permitting the admission of female physicians to membership, was defeated by a vote of 79 yeas and 48 nays, it requiring a two-thirds vote for the passage of the amendment."

It is just the reverse. The amendment that was defeated provided for the insertion of the word *male* after the word *regular* in the by-laws, which would have made the clause read, "The Society shall consist of regular *male* physicians." This amendment was defeated, which has the effect of still permitting women to knock at the doors of the County Society for admission.

The Garfield Memorial Hospital.

The Board of Directors hope to open this hospital in May. The medical and surgical staff has been formed as follows:

Consulting Surgeons.—Drs. Fred. May and N. S. Lincoln.

Consulting Physicians.—Drs. W. W. Johnston, J. Taber Johnson, and A. Y. P. Garnett.

Attending Surgeons.—Drs. C. E. Hagner and J. H. W. Lovejoy.

Ophthalmologist and Otologist.—Dr. Swan M. Burnett.

Our New Police Force.

Mayor Smith has determined to follow the rule that has for years been in practice in New York, Boston, Pittsburgh, Chicago, and other large cities, of requiring that the police shall be of sound mind and body. He requires that a thorough examination be made of each applicant and member of the force.

The Mayor also intends to remodel our police force, and introduce some of the features in relation to the medical department that have been found so successful in other cities.

American Medical Association and Railroads.

We are authorized by the Chairman of the Committee of Arrangements, at Washington, to state that arrangements are being made with all railroads reaching Washington from every section of the country, looking to a reduction of fare for delegates to the Association, which meets in that city on the first Tuesday in May next. Those who desire further information upon this subject can apply to Dr. D. W. Prentiss, of Washington, D. C.

The Quintessence of Listerism.

The Vienna correspondent of the *Gazzetta degli Ospitali* was recently invited to a laparotomy in Professor Billroth's clinic in the following note: "Dr. — is hereby invited to the operation of —, which is to take place —. It is understood that Dr. — undertakes not to visit the same day, before the operation, sick rooms, dissection rooms, or other places in the Pathological Institute, and not to wear clothes which he may be in the habit of wearing in visiting these places."

Items.

—Colonel George L. Perkins, of Norwich, Conn., who is 96 years old, said in a recent interview: "I have buried six family physicians, and still live."

—The Missouri State Medical Association will hold its twenty-sixth annual session at Sedalia, on Monday, May 5, 1884, and the two following days.

—A bill to regulate the practice of medicine and the sale of medicines in Utah was passed by the Legislature, but vetoed by the Governor, at the solicitation, as we are informed, of certain patent-medicine men.

—An effort to abolish gradually the liquor traffic, by selling licenses annually at auction, increas-

ing their price each year \$100, and decreasing the number annually sold, has been commenced in this city.

—The Rumford Chemical Works gained another suit last month in an action against some of the imitators of their yeast powder. A perpetual injunction was granted against L. E. Wetter and eighteen others in the case.

OBITUARY NOTICE.

DR. JONATHAN A. WHITE.

Dr. Jonathan A. White, of No. 672 Lafayette avenue, Brooklyn, died March 30th, at Macon, Ga. He was born in Baldwinsville, Mass., in 1830, and studied medicine at Woodstock, Vt. He entered upon the practice of his profession in Brooklyn, and afterward at Baldwinsville. He served as an army surgeon during the war, and saw hospital service in New Orleans and Vicksburg. After the war he returned to Brooklyn, and for twelve years he was medical examiner for the Metroplitan Life Insurance Company. Heart disease caused his death. Dr. White was a widower, and he left no children.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

Please tell me what change is made in whisky by burning to render it medicinal. SUBSCRIBER.

Ans.—We never heard of burning whisky for medicinal purposes, but suppose it would drive off some of the volatile oils and weaken it somewhat. Brandy is frequently burned, even when used simply as a beverage.

Dr. D. C., of N. Y.—You will find the formula for the original "Basham's mixture," also for the improved Basham's mixture prescribed by Dr. Da Costa, in Napheys' *Medical Therapeutics*, seventh edition.

Dr. D. N. P., of N. C.—In Seguin's fever-thermometer you read upwards or downwards from the normal point; in others the scale is ascending. Your inquiry is not quite clear, but we believe this answers it.

Dr. K. F. P., of Conn.—We do not think that abnormalities of growth are signs of atavism; their origin is generally traceable to fetal conditions.

Physiologist, Pa.—We do not desire any legislation whatever on vivisection, and can see no occasion for it in this commonwealth.

MARRIAGES.

PETTY—MILLS.—At Antigo, Wisconsin, Saturday, February 16, 1884, Dr. J. C. Petty and Hattie M. Mills.

MARKLEY—KNIGHT.—At the residence of the bride's parents, March 12, 1884, Dr. Paul H. Markley, of Hatboro, Pa., and Miss Emma J. Knight, of Holland, Pa.

DEATHS.

YOST.—At Loganville, York county, Pa., of cerebro-spinal meningitis, George Leroy, son of Dr. George P. and Olivia V. Yost, in his fifth year.

SAUNDERS.—In Cincinnati, Ohio, at 11 o'clock p. m., Sunday, March 16, 1884, Richard Westrop Saunders, M. D., Vice Consul to Italy.

THE MEDICAL AND SURGICAL REPORTER.

No. 1416.]

PHILADELPHIA, APRIL 19, 1884.

[Vol. L.—No. 16.]

ORIGINAL DEPARTMENT.

LECTURE.

ATROPHIC NASAL CATARRH.

A CLINICAL LECTURE DELIVERED TO THE POST-GRADUATE CLASS AT THE UNIVERSITY OF PENNSYLVANIA.

BY DR. CARL SEILER,

Instructor in Laryngology and Lecturer on Diseases of the Throat, Nose, etc.

GENTLEMEN: There is a class of cases of nasal disease which has as yet received very little attention by writers and practitioners, and which, although not as commonly met with as other varieties, yet is frequent enough to merit our consideration. This class of cases is characterized chiefly by a peculiar penetrating odor emitted by the nasal cavities, which is sometimes so strong as to make the presence of the patient in a room almost unendurable. On account of this odor, the disease has been termed "ozæna" by the older writers, a term which is incorrect and misleading, as it merely implies one of the symptoms of the affection, viz.: the bad odor, and this may be present in other forms of nasal disease.

It will be best for you to examine this boy yourselves, to appreciate the pathological changes which have taken place in his nasal cavities, before we can discuss the treatment suited to this affection. You see that the posterior wall of the pharynx is extremely dry and shiny, without any elevation or enlargement of the follicles and glands which we are accustomed to see in the ordinary form of nasal catarrh. The rhinoscope shows the naso-pharyngeal cavity to be lined with large seabs of hardened secretion, so that very lit-

tle can be seen of the mucous membrane. The posterior ends of the turbinated bones, as they project into the openings of the posterior nares, are thin, and where the mucous membrane can be seen through the coating of inspissated secretion, it appears pale in color. The same condition of things is seen in the anterior nasal chambers, which are occluded by large plugs of hardened secretion, and appear unusually wide, because the lower turbinated bone seems to be absent. Careful and persistent questioning fails to reveal any specific taint in the patient, and in fact he is almost too young to have acquired syphilis, being only fourteen years of age. What he complains of is obstruction of the nose, dryness of the pharynx, loss of sense of smell, and the stench from his nose.

What is the cause of this accumulation and inspissation of secretion, which, by becoming putrefied, produces the odor? The answer to this question is the key-note to the pathology of the disease, and also the guide in the rational treatment of the disease.

After thoroughly cleansing the nasal cavities, and removing the plugs of hardened mucus with copious streams of an alkaline solution, we see on inspection that the mucous membrane throughout the nasal cavities is in a state of atrophy, which affecting the turbinated bones also, has materially reduced their size, so that you can easily see the pharyngeal wall through the anterior nasal cavities. This atrophy affects chiefly the serous glands, which, as you know, are quite numerous in the nasal mucous membrane, and which, by their secretion when in a normal condition, makes the mucus thin and watery, so that

it can easily be removed by blowing the nose; when however, as in the case before us, they are atrophied, and their secretion reduced to a minimum, the mucus secreted by the mucous glands remains viscid, and clings to the surface of the mucous membrane, becoming rapidly desiccated by the current of air inspired through the nose. This atrophy of the mucous membrane, extending as it does up into the olfactory region, affects the terminal fibres of the olfactory nerve, and thus the loss of the sense of smell, which is a common symptom in these cases, is brought about.

The ozæna or stench may, however, be occasioned in other forms of nasal disease, by the accumulation and putrefaction of secretion behind swellings or tumors where by the ordinary means of cleansing the nose, by washing and blowing, it cannot be easily removed.

Ulcerations are rarely met with in this disease, although they are sometimes found, usually on the anterior portion of the cartilaginous septum. The general health of the individual has nothing to do with the causation of the disease, and its origin is as yet unexplained. It is likely, however, that it originates as a hypertrophic nasal catarrh, and rapidly passes into the atrophic stage, for we frequently meet with cases in which one side still presents the characteristics of the hypertrophic form, while the other side has already passed into the atrophied condition.

The treatment for atrophic nasal catarrh must be divided into two portions, viz., the removal of the accumulation of secretion and the disinfecting of the nasal cavities to remove the odor, and the stimulation of the mucous membrane, with a view to the regeneration of the serous glands.

This may be accomplished in the following manner: The nasal cavities are first cleansed with a copious stream of alkaline solution from the nasal douche; and let me tell you here, that this is the class of cases in which this much-abused instrument is not only applicable, but extremely useful without being harmful. If after this, any plugs remain in the nasal cavities, they must be removed with a pair of forceps, and the washing repeated until all secretion has been removed, as you saw me do in the case before us. The next step is to disinfect the nasal cavities. Various substances have been used for this purpose, such as permanganate of potash, chlorine water, tar water, carbolic acid solution, iodoform, and many others; but they all have either great disadvantages, or else are but partially effectual. Lately I have used a preparation called Listerine, which answers the purpose admirably, without having any

of the disadvantages of other disinfectants. It is a combination of the essential oils of thyme, eucalyptus, gaultheria, and other plants, together with a small quantity of benzo-boracic acid, and should be diluted one-half with water when used by the atomizer. The immediate effect is to at once destroy the stench from the nose, and to substitute for it the odor of the oil of thyme, which is rather pleasant than otherwise. I am in the habit of using a spray of this solution before making an examination, or before I cleanse the nasal cavities of such cases, thus mitigating very materially the discomfort to myself arising from the stench. The patient is directed to cleanse his nose with a solution of two drachms of bicarbonate of soda to one quart of tepid water morning and evening, and to throw a spray of the Listerine solution into the nostrils after the cleansing. Treated in this manner, I have seen many cases in which the odor was barely perceptible after the lapse of three or four days, and remained in abeyance throughout the treatment. The oil of thyme and of eucalyptus, besides being disinfectants, have also a stimulating effect upon the mucous membrane, and thus aid in the second portion of the treatment.

The stimulation of the serous glands to a normal action may be brought about by a variety of remedies, such as astringents in various strengths; but in my experience the insufflation into the anterior nasal cavities of finely powdered nitrate of silver, diluted with starch powder, has given the best results. Where there is complete absence of the lower turbinated bones, the introduction of a wad of absorbent cotton, which is to remain until washed out, and then be re-introduced by the patient himself, often aids in the stimulation by continually irritating the mucous surface with which it is in contact. Next in effectiveness to the silver powders, I have found a weak solution of ferric alum in the form of a spray thrown into the nasal cavities, and the natural iron water of Cresson springs is peculiarly adapted for these cases.

A treatment such as this carried out for several months has given, in my hands, most satisfactory results.

The internal administration of small doses of bromide and iodide of potassium in combination, on account of their influence upon the nasal mucous membrane, will greatly aid the local treatment. At the same time we must look to the general health of the patient, and administer tonics when their use is indicated. Whenever practicable a change of air should be advised, and the

mountain resorts are preferable to the seashore in all cases of catarrhal inflammation of the upper air passages, especially where the climate is a dry one.

COMMUNICATIONS.

CLINICAL CASES OF PUERPERAL CONVULSIONS AND PUERPERAL ALBUMINURIA, WITH REMARKS.

BY LAMBERT OTT, M. D.,
Of Philadelphia.

[Read before the Northern Medical Association of Philadelphia.]

Mrs. J., primipara, aged 23, very large boned, stout, and fully six feet tall, passed through her pregnancy with very little disturbance. Labor came on at full time. I saw her in the evening at six o'clock, and found the os open the size of a twenty-five cent piece, and the vertex presenting in the first position. Everything progressed favorably till about three o'clock the next morning—nine hours after the inception of the labor—when the head remained fixed in the pelvic cavity, with no indications of it moving forward. Being refused the application of the forceps, I waited till four o'clock, and urged her to bear down with each pain. She now complained of headache, and of it being intensified during the pains. Just after a pain I called to her and she gave me no answer, which I supposed was due to the naps she was in the habit of taking in the interval between the pains. Another pain came, and she made quite a desperate effort at bearing down, when a violent convulsion occurred, beginning in the muscles of the face, then extending all over the body, and lasting a minute or more. Immediately after the spasm, she being unconscious, I delivered the child, alive, with the forceps, and was in the act of taking away the placenta, when the second spasm took place, producing a ghastly sight, twisting her around to a different side of the bed. By this time chloroform arrived, and I straightway began its administration. After being partially anesthetized, I delivered the placenta without difficulty.

I then looked for signs of dropsy, and found none. Drawing a little urine and testing with heat, it was found to contain $\frac{1}{8}$ to $\frac{1}{2}$ albumen. Dr. F. being called in consultation, we decided to bleed to the extent of thirty ounces, to give $\frac{1}{2}$ gr. of morphia hypodermically, and 2 gts. of croton oil, which was done; the chloroform being lightly

given when twitching of the facial muscles was apparent. She regained consciousness eight hours after the first convulsion, and all up to that time was blank. The albumen rapidly disappeared from the urine; and, excepting a slight attack of septicæmic fever, she made a perfect recovery. I questioned her closely afterward in regard to the existence of symptoms pointing to kidney disease. She denied having noticed any save a slight swelling of the ankles, and in other respects she says she could not have felt better.

Case No. 2 was under the care of a very able physician, who was kind enough to give me the following verbal report: Mrs. M., aged 25, primipara, of a naturally healthy constitution, seemed to get along well till the beginning of the ninth month of her pregnancy, when an insufferable headache came on. Her urine was examined and found highly albuminous; later, a moderate amount of dropsy set in. Wet cupping to the back of the neck, dry cups over the kidneys, brisk hydragogue purgatives and diuretics were ordered, with relief of all the symptoms save the albumen, which remained in considerable quantities. She was kept under close observation, and whenever the symptoms became aggravated the remedies were pushed, with prompt relief. Her confinement passed over without any difficulty till the morning of the second day, when she complained of a return of the severe headache. The urine contained albumen. Purgatives and diuretics having been continued in moderation, were again used, but not with decided relief. In the evening of the second day after the confinement, her headache became aggravated. Wet cupping was again ordered. The cupper reached the house fifteen minutes sooner than the physician, and she requested him to wait until the doctor arrived. Just as the physician rang the bell she remarked, "'Tis the doctor; I know his ring," and when he reached the door of her room, she turned her head to look at him, and while in the act her eyes stared, neck became rigid, muscles of the face became convulsed, followed by a general spasm simulating a rigor of a minute's duration, in which she expired. The moment the physician noticed the staring and rigid countenance he opened a vein, but the blood made only a feeble attempt to flow; and while trying to induce a better spirting, she sank back dead, suffocated by spasm of the respiratory muscles, she never breathing once after the convulsion began.

Case No. 3. R., multipara, aged 35, did well during her pregnancy till the eighth month, when

she complained of her feet swelling and headache. The urine contained $\frac{1}{2}$ albumen. The usual remedies—cups and depuratives—were resorted to with considerable relief. At the time of her confinement the urine contained some albumen. Labor terminated in three hours, and everything was progressing favorably, when on the second day a severe headache and dimness of vision set in, with no fever, which only very active bleeding from the arm and depurative measures relieved. She convalesced soon. This same woman became pregnant about two years afterward, and having had a scare during the previous pregnancy, I made it a point to examine the urine every second week during the latter months. Just two weeks before the confinement her urine was tested, with negative results. Labor lasted four hours, and passed over favorably.

Two hours after leaving the house, a hasty message came, and I found quite a sudden change. The patient was propped up with pillows, expectorating bloody and frothy mucus; respirations 40 to 60 per minute; pulse 120 to 160; and all the signs of great danger. I hastily examined the uterus, which was well contracted; calmed her excitement; auscultating the chest posteriorly, I found diffused, large bronchial rales, showing pulmonary œdema. She was straightway dry-cupped, carbonate of ammonia, digitalis, and a brisk purgative were given. The urine was examined, and found to contain a moderate amount of albumen. The alarming symptoms passed over gradually, and in a week the urine contained no albumen.

Case No. 4. Primipara, aged 26, came to my office complaining of symptoms which directed my attention to the kidneys. Examining the urine, it contained one-half albumen. I prescribed, and ordered her to return in three or four days, which she did not do. The case escaped my memory until a call came for confinement. It turned out to be an instrumental delivery, and after all was over, I asked her how she got along after leaving my office. She answered: "I felt so well that I did not get your medicine; there is the prescription on the mantel." The urine now contained no albumen.

Case No. 5. Multipara, aged 32, in her seventh month of pregnancy, became enormously dropsical; even the eyelids and upper extremities were very much swollen. The urine was fully one-third albumen, and only a pint daily was passed. She suffered no inconvenience, no headache, etc., till the eighth month, when quickening ceased, and soon afterward a dead child was expelled.

The usual remedies were applied, and a rapid recovery took place.

The first case shows how little disturbance puerperal albuminuria may cause prior to confinement, even so little as to pass unnoticed, and during delivery to culminate in convulsions.

In the second case the albumen existed in considerable quantities, with moderate dropsy and the attending symptoms of a graver character, terminating in convulsions and death two days after delivery.

The third case had a moderate amount of albumen with much dropsy, and an occasional exacerbation of the attending symptoms, which were relieved by treatment. The following pregnancy showed a sudden appearance of albumen and of pulmonary œdema three or four days after delivery.

The fourth had one-half albumen, with slight anasarca in the eighth month of pregnancy, and progressed favorably without treatment.

The fifth had enormous dropsy and very much albumen in the urine; no bad effects following, except the death of the child and its subsequent expulsion.

Barker relates a number of cases of puerperal albuminuria, with and without convulsions, and one case of puerperal convulsions where no albumen was detected in the urine.

I, together with Dr. F., have seen many cases of puerperal albuminuria which have produced little or no constitutional disturbance; and in all our cases of puerperal convulsions the urine was found to contain albumen.

On inquiry of a number of practitioners having a large experience, I learn that in all their cases of puerperal convulsions they always found albumen in the urine. I have often thought, to what extent can these rare cases of puerperal convulsions with non-albuminous urine be explained on the theory of being epileptics, or having an epileptic tendency by inheritance, and the peculiar condition of the system induced by pregnancy, or the difficult and protracted labor, act as an exciting cause in developing the fit? Is there not also a possibility of these cases having an alkaline urine, and not being rendered acid previous to boiling, refuses to coagulate? I have no personal experience to offer, and I only give these points as plausible suggestions, to stimulate further thought in this direction. The following conclusion may be drawn from the foregoing cases:

A large amount of albumen with considerable dropsy is not a necessary factor in the production of puerperal convulsions.

In my experience, *some albumen* in the urine, with little or no dropsy, is an important and necessary factor in the production of puerperal convulsions.

In some cases puerperal albuminuria is comparatively a harmless trouble, passing over without any treatment. As for the spasm being a cause of the nephritis, the weight of evidence is very much against it. I have repeatedly examined the urine of children after convulsions, and found no albumen. Parenthetically, I would ask what is known as to the condition of the urine after the spasm of epileptics?

One point in the semeiology of puerperal convulsions needs to be emphasized, particularly for the benefit of those having little or no experience in these cases. Whenever you have a patient in the latter months of pregnancy, say in the eighth or ninth month, having some albumen in the urine, complaining of severe headache, and a heavy, dull feeling pervading the body, occasionally associated with attacks of dimness of vision, *then take care*. In many instances, if this patient is not handled skillfully by depurative measures, some day you may find her in a severe and perhaps fatal convulsion. There need be no fear of giving such remedies as drastic purgatives, diuretics, and bleeding from the arm, for I have resorted to them till the patient was blanched, with the happiest results.

My experience teaches me that as long as a pregnant woman having albumen in the urine is free from headache, there is no immediate fear of convulsions. The headache preceding a spasm is not sudden in its onset, but comes insidiously, being so slight in its inception as to pass unnoticed, and gradually increases until it culminates in a convulsion, or is relieved by appropriate and timely treatment. The headache preceding the convulsion during the act of parturition is sudden in its onset, as one of my cases (No. 1) fully exemplifies. This patient only complained of pain in the head during the last two pains prior to the spasm. During each pain and bearing down effort it was intensely aggravated, and while in the last pain, she was seized with the convulsion. The headache preceding the spasm after the parturient act has similar characteristics to the headache prior to the confinement, though convulsions occur less often in this period.

I will offer only a few general remarks on the treatment of the two complaints. ▲ pregnant woman with albuminuria should be gently informed that her kidneys are not working properly, and that a little medicine, with some attention, is

necessary. In imparting the news, do it in such a manner as not to create alarm. Some advocate not telling them the nature of their trouble; but if you want your patient to neglect herself, follow this plan. In uncomplicated cases of puerperal albuminuria, mild diuretics, laxatives, occasional hydragogue cathartics, and as much rest as possible, is all that is necessary. In such cases where the symptoms assume an aggravated character foreboding convulsions, more active measures are indicated: general depletion, or dry cups to kidneys and nape of the neck, and depuratives of considerable potency. Perhaps the most trying position, and one where the young physician finds himself at his wits' end, is when he has puerperal convulsions suddenly before him. If a spasm occurs before labor sets in, and he has no medicine at hand, he can only loosen her clothing, protect the tongue and open a vein; if he has a hypodermic syringe, give one-half grain of morphia, or administer an anæsthetic, the latter being preferable when the spasm is in activity; should he not give morphia hypodermically, then give chloral in 20-grain doses, either by the mouth or rectum. Having subdued the spasm, he has now to induce labor—provided it has not already begun—by Barnes' dilators, ergot hypodermically or by the mouth, and warm-water injections.

Authorities are divided as to waiting for labor, but the most successful plan is to induce labor a few hours after the spasms have ceased. While labor is going on, all tendency to spasmodic action is overcome by chloral or an anæsthetic. After the child is born, depuratives in moderation should be given, at the same time keeping her gently influenced by chloral. Even when all depurative remedies are contraindicated, give diuretics at any rate. In other cases where labor is going on, the presenting part being in the pelvic cavity, and convulsions occur, subdue them with your remedies, then hasten delivery, and the after treatment is on the same general principles as previously enunciated. When the spasm takes place after the delivery of the child (my experience teaches me that they are not less dangerous than those at other periods) general principles are again indicated. A plan which I follow in cases of albuminuria in the latter months of pregnancy is to caution my patients, in such a manner as not to excite alarm, that whenever headache sets in to notify me immediately so that I can give them the proper attention; and when they do report I make preparations for any emergency, and keep my eyes wide open.

1531 North Seventeenth Street.

FLORIDA AS A HEALTH RESORT.

BY M. J. HALLORAN, M. D.,
Of Worcester, Mass.

Compelled, during convalescence from an attack of pneumonia, to seek a warmer climate, I have during the current year passed several months in Florida, most of the time in Jacksonville and St. Augustine. This brief resumé of the present condition of Florida, particularly considering its advantages and disadvantages as a health resort, will be founded on personal experience, supplemented by the more extended observations of Drs. Kenworthy and Baldwin, of Jacksonville; Dr. Logan, of Atlanta; Dr. Jacques, of Fernandina; and Dr. Charles E. Lee, the learned editor of Copeland's Medical Dictionary.

When the merits of any particular place or region, as a health resort, come into question, the first factor to be considered is its condition as regards climate. The climate of any locality, professionally speaking, depends upon its temperature, atmospheric vicissitudes, prevailing winds, humidity, its elevation above the sea level, proximity to the ocean or oceanic currents, its contiguity to lakes, rivers, or mountains, its condition as regards soil, drainage, vegetable productions, malaria, general sanitation, etc.

Temperature is a very important factor in climate, a very large proportion of the profession advocating a warm, dry, sunny climate for the successful treatment of many diseases, particularly those affecting the pulmonary organs. The climate of Florida leaves little to be desired at this point of view. The thermometer rarely falls below 30° in winter, and seldom goes above 90° in summer.

Dr. Baldwin's tables, kept for the Smithsonian Institute, and compiled from the mean of three daily observations during twenty years, from 1844 to 1867, at Jacksonville, show the ordinary temperature to be in January 55°, in February 58°, in July and August 82°, falling during the month of December to 52°.

During the first four weeks of the current year, which I passed in Jacksonville, the temperature ranged from 55° to 65°, but the fourth week was stormy and chilly, with strong northwest winds. For several days a light overcoat was necessary, and during the entire period of my stay, I found no inconvenience from wearing the heavy under-clothing and winter woolen business suit I had worn in Massachusetts. The nights were uniformly cool and rather damp in Jacksonville; blankets were a necessity, and in the morning I

found my windows (fronting directly on the St. John's river) covered with moisture; in fact, the river itself was overshadowed with an impenetrable mist until 9 a. m., when it was slowly dissipated by the rays of the sun.

Jacksonville is a pleasant place as a residence; the streets are wide and shaded by magnificent live-oak trees, rendered picturesque by the hanging masses of Spanish moss. The use of the wild orange as a shade-tree makes walking more interesting, for the orange tree in winter, with its dark green glistening foliage and bright yellow fruit, is a beautiful object, especially to the visitor who has left behind him two or three days previously the piled-up snow banks, naked trees, and searching blasts of a northern winter.

The complaint is frequently made that there is nothing to interest the visitor in Jacksonville—that it is merely a stopping-place en route to some place "up the river."

Such, in reality, is the use to which it is put by many visitors, who lounge out the period of stay at the hotels. Yet a very pleasant sojourn can be made there. The streets are heavy and sandy, and carriage riding is not so pleasant as saddle exercise or walking. There are many pleasant walks: beyond the Way-cross Station, along the shell road, by the side of the river, or across the river by the railroad ferry, and along the road parallel to the river, furnish many points of beauty, and give a good idea of semi-tropical scenery. In fact, to one who is willing to take open-air exercise and is not afraid to walk, Jacksonville need not prove uninteresting; the weather is generally such that a weak person can be out almost any time during the day; we have seen invalids on the streets, and in the woods, who, at the same time of the year, would be unable to leave the house at the north.

During our stay in the city, a lady died who had come there seventeen years previously suffering from consumption; her life had been indubitably prolonged many years by residence in this mild climate.

The variations in temperature at St. Augustine, where I passed the month of February, are still less marked; the army records for twenty years show an average variation of but 23°.

There is still more inducement to pass the time in the open air in St. Augustine; the weather during my stay was delightful, day after day was clear and sunshiny, the thermometer registering between 70° and 80°.

Early in the morning it was frequently rather close, but later on before noon a breeze sprung up,

which rendered out-door exercise a pleasure. And the city itself is so very interesting; it is true, all its sights can be seen, tourist-fashion, in two or three hours; but to the visitor seeking health, a much longer stay fails to exhaust the items of interest. The invalid can enjoy any part of the day in the open air; and the moonlight evenings, which have lost none of their charm since the writer on "The Ancient City" so romantically described them in the article in *Harper's*, are generally passed on the wide southern verandas, or listening to the music discoursed by the excellent military band, on the plaza.

We have become acquainted with invalids in St. Augustine, suffering from consumption, chronic bronchitis, asthma, chronic rheumatism, and other complaints, who passed their time in the open air, sailing to the north and south beaches, going on trips to Matanzas, fishing, etc., individuals who at the same period of the year would be almost entirely confined to a close, over-heated apartment at the North. Northern ladies and their families are generally more content in St. Augustine than elsewhere in Florida. It is an undoubted fact that Northern-born ladies are not, as a rule, favorably impressed with life in many sections of Florida. This appears somewhat strange when we consider that the climate, fruits, garden dainties, and the like, such as women are usually fond of, are so abundant. The principal source of their objection is the same as in all new countries; women prefer old, settled communities, churches, schools, society, sidewalks, and intimate social intercourse. The sandy soil, heavy roads, and absence of sidewalks, especially in South Florida regions, are at the foundation of the prevalent discontent among the women. In the towns in Northern Florida, where improvements are more general, there is more content among the female members of the family.

In the matter of healthfulness, St. Augustine must take a high place among Florida resorts. Malaria is almost unknown, and the constant sea breezes moderate the cold spells in winter and mitigate the heat of summer. Frosts seldom occur, and the mean winter temperature is 58.8°. Just before I left the city, we had a series of thunder storms, the rain pouring down incessantly two or three afternoons in succession. The rainfall was considerable, but it was almost entirely absorbed by the sandy soil in a short time, and in less than twelve hours it was possible to walk dry shod on any of the streets.

After these storms, vegetation was bright and beautiful; the banana plant, looking hitherto like

a gigantic withered cornstalk, put forth green shoots; the yellow fruit and dark glistening leaves of the orange tree looked brighter, and even the stretch of pine barren between St. Augustine and Jacksonville, along the new and well-appointed St. John and Halifax river road, took on a different aspect, and appeared less monotonous. Four days later, I was in the midst of a driving snow-storm in Massachusetts.

After a season passed in Florida, one can readily regard as absurd the dictum of fashion, which sends so many families from comfortable homes, large, well-aired rooms, and accumulated home comforts during the summer season, to crowded hotels, discomforts of every description, and the costly prices of seaside resorts, to avoid the heated tern, which, except in the largest cities, can be passed with equal immunity from disease at home. But it is not considered at all necessary to avoid the extreme and sudden variations of temperature of the Northern winter, during which a great part of the time is passed by even the most robust within doors; the more weakly remaining almost the entire winter in close, over-heated rooms, with the air loaded with noxious exhalations and coal-gas. It is true that formerly it was considered necessary to undergo the discomforts of a journey to the South of France or to Italy in search of a mild and pleasant winter climate. But to-day, with the very much improved and rapidly-improving railroad facilities at the South, and the rapid influx of Northern capital and enterprise, a season in Florida is almost as enjoyable as one passed at one of the Continental winter resorts.

As regards advantages of climate, the average temperature at Cannes for the five winter months from the first of November to the last of March is 50.8°; at Nice 49.9°, and at Jacksonville 58.7°.

Florida has always ranked high in the climate-cure of pulmonary diseases, and the general testimony of invalids and practitioners bears out this view.

Of course, if the case is already hopeless, if the patient is emaciated to the last degree (we have seen such individuals in Florida), then no great benefit can be expected; and the rapidly-fatal result which often ensues on their removal there can by no means be laid to the climate, but is often caused by the fatigues of travel, and the absence of the home care and nursing to which the enfeebled individual has long been accustomed.

Yet Dr. H. A. Johnson, of Chicago, states: "I had about fifty patients last winter in Florida and Georgia, and they came back better. Even those

in whose lungs cavities existed were better than they would have been if they had remained in Illinois." Dr. Wilson, late Medical Inspector of Camps and Hospitals, U. S. A., remarks: "Neither upon the southern coast of France nor anywhere under the bright Italian skies, can a winter climate be found so equable and so genial to the delicate nerves of most invalids, as can be enjoyed in our sanitary stations in Florida."

This remarkable freedom from disease was noticed in the garrison who occupied St. Augustine during the British possession; and to-day you will meet in "ye ancient city" men who have a kindly memory of the climate since they formed part of the U. S. troops who occupied the place during our late civil war.

As Dr. Jacques, of Fernandina, writes: "There are two things which the invalid cannot enjoy to their full extent at the North in winter—fresh air and sunshine. These are the things to come South for, and coming for these there will be no disappointment. The fresh air you will get every hour of the day or night; you cannot shut it out if you would. As for the sunshine, one bathes in it, breathes it, drinks it in at every pore, till it permeates the whole system; and there is no medicine like it. It is the invalid's own fault if he does not get enough of it; to what end is the South 'sunny,' if one will shut himself up in a darkened room?"

But in forming an opinion regarding climates, many factors must be considered; and altitude is of less importance than temperature, prevailing winds, dry soil, and low mean relative humidity. "With regard to the temperature of the air, it is absolutely certain," says Prof. Buhl, "that it is not the mean temperature which regulates the frequency of catarrh or phthisis, but only the larger, sudden, and oft-recurring vacillations of temperature, which the compensatory power of our body is unable to resist." Therefore the temperature of the air and its rapid vacillations must be regarded as exciting causes of inflammatory phthisis.

Atmospheric changes in the North and West are sudden and great, but in Florida they are infrequent and not extreme. At times what are termed "cold snaps" occur, but they seldom last over two or three days, and at any time the invalid may take exercise out of doors in the middle of the day. Owing to the low level of the land, the absence of snow and ice, and the warmth of the soil for a long distance to the north and west of the State, and the influence of the winds from the gulf, the northerly and westerly winds are

robbed of their harshness and refrigerating effects before they reach Florida. Easterly winds are the prevailing ones during the winter months, but owing to the proximity of the Gulf Stream, with its vast volume of heated water, to the east of the coast, these winds are also robbed of the harsh and searching properties which characterize them in most localities.

In a word, Florida appears to offer more attractions and advantages as a winter resort for invalids than any other State in the Union. The temperature is favorable, the mean relative humidity is peculiarly adapted to the treatment of all forms of pulmonary disease; the air is salubrious, and in a large portion of the State dry and bracing; atmospheric changes are infrequent, and not so great as in other sections east of the Rocky Mountains.

The State possesses insular, interior, dry, and moist localities, semi-tropical and cooler sections, and if the nature of any given case should necessitate a change of base, a suitable climate can be reached in a few hours and at a trifling expense.

HOSPITAL REPORTS.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Constitutional Syphilis.

You will remember this patient, gentlemen, as the one whom I presented to you two weeks ago (see REPORTER, p. 329), with a general eruption over most of his body. You remember his case was a curious one, because he gave a history of having had several chancres. I think at three separate and distinct periods he had chancres or ulcers on his penis. But after the first and second there were no constitutional symptoms, while after the third, contracted last summer, there were. This sore was unique, and made its appearance, as we have since learned, after the classical period of twenty-one days from the time of infection. And six weeks after the sore appeared, he broke out with the roseola, which you saw; and you remember there was also a condition of general adenitis, and an especially marked swelling of the posterior cervical glands and those of the groin. The roseola and the swelling of the face, and the watery effusion of the eyes, were so pronounced that he presented very much the appearance of a man with measles.

He was put upon mercurial treatment, and now you see the eruption has almost disappeared, the face has a natural expression, and the swelling has gone, and he is not at all the same man in appearance that he was when you last saw him. The eruption has not yet entirely disappeared from the head and body, but it is more sparse and

less distinct than it was. But it still has a copery hue, and does not entirely disappear on pressure, as do the spots in a non-specific erythematous eruption. There is still some swelling of the posterior cervical, and the glands of the groin, but it is not so marked as it was. On examining the throat, I find no eruption there. He is now taking the biniodide of mercury, and is in the first stage of pyalism. If you will examine his gums, you will see the peculiar appearance they present in this stage. They are red and swollen and soft, and at their junction with the teeth thick sordes has collected, which contrasts strongly with the bright red margins of the gums. The peculiar fetor of the breath is also well marked.

There is one peculiarity about the eruptions of the secondary period of syphilis, and that is that when a patient has had one attack of an eruption, he is by no means protected from a second attack within a period of two years. But this liability to an occurrence depends much upon the treatment of the case. If within this period you cease from the constitutional treatment, and allow the patient to go back to his former habits of living and drinking, before long he will probably come back to you again with an erythematous or papular eruption on the integument of the body and extremities, or on the mucous membranes lining the different orifices of the body, that is in the mouth or throat or anus, or on the glans penis. It is important to remember that there is this liability to a recurrence, for from eighteen months to two years after the beginning of the treatment. Ricord claimed that it was necessary to keep up the treatment for eighteen months, and his plan was to keep the patient on mercury alone for the first six months, on mercury and iodide of potassium combined for the second six months, and on potassium iodide alone for the third six months. This treatment he thought might be successful in extirpating the disease. There is not now as much faith in this plan of treatment as there was a few years ago; yet the general opinion is still that the patient should be kept under the appropriate treatment for at least a year or eighteen months. I believe, however, that none of the cases of constitutional syphilis are ever perfectly cured. I would keep the patient under observation and direct his mode of life, and withdraw all stimulants, and on every recurrence of the eruption renew the specific treatment.

Iodism.

The patient, J. C., was admitted on October 3. He is single and a laborer, age 39, a native of the United States. Has been accustomed to drinking ale and beer, but not to excess. Twenty years ago he had a chancre, which was followed by a secondary eruption. He was successfully treated for this, and was well for a number of years. Five years ago he had an attack of rheumatism, affecting all the joints, which lasted for eight months. He also complained of pain in the cardiac region at the same time. Four years ago a rash broke out on his scrotum, anus, and thighs, which exuded a watery fluid, which dried into scales or crusts. Last August, several ulcers appeared on his ankles, which he treated himself, with black wash and other local applications. On

his admission to the hospital October 3, he presented an ulcer on the inner side of the left ankle and another on the outer side of the right ankle. These were irregular in shape, and showed no tendency to heal. The ulcers were treated locally with iodoform, and he was put upon the mixed treatment for constitutional syphilis.

October 20. The ulcers are sluggish, and not healing rapidly.

November 3. A Martin's rubber bandage was applied for the purpose of keeping up pressure on the neighboring vessels. On October 28, over two-thirds of the right leg, and on the anterior portion of the left, appeared an eruption of small red spots, attended by much itching. These continued to increase in extent and size, and they poured out an exudation, which dried and formed crusts upon them.

November 11. The ulcers are much improved, but the eruption continues to spread.

November 19. Patient was put on liquor potassii arsenitis, 5m three times a day, to try its effect both upon the eruption and the ulcers. The mercury and potassium iodide were stopped.

November 22. The eruption has spread to the arms and thighs, where it is circumscribed and papular, and it has become diffuse over the legs, which the hardened exudation has coated with a thin, scaly crust. Citrate of potash, 30 grs. three times a day, was added to the treatment.

November 25. Fowler's solution was discontinued. The ulcers are almost cured, and are doing well.

November 26. The ulcers on the ankles are entirely healed. The dose of the citrate of potash has been increased to 40 grs. three times a day.

Since the patient has been under observation, his bowels have been regular and appetite good, and there have been no urinary symptoms. For seven and a half weeks he took $\frac{1}{2}$ gr. of the biniodide of mercury and 10 grs. of the iodide of potash thrice daily, but eight days ago they were discontinued. He says that he had no cutaneous eruption in childhood. A plain roller bandage was later on in the treatment substituted for the elastic bandage. On admission, his pulse, respirations, and temperature were normal, and have continued so up to the present time.

Gentlemen, the striking points in this man's history are, that previous to his admission he seems to have had a tendency to rheumatic affections for some years, and also that he underwent a course of treatment for a primary syphilis contracted twenty years ago, and no constitutional syphilis has since manifested itself in any way, until he entered the hospital with two ulcers on the ankles. But these ulcers were described in such terms as to leave no doubt of their syphilitic character, for the features of a tertiary ulcer are very characteristic.

Since he came into the hospital he has developed the condition of affairs which I now show you. You see it is an eruption upon the skin of the legs chiefly, and reaching from his feet to his hips, and it also covers the arms to a considerable extent, but it is not much developed upon the rest of the body. This began as a disseminated eruption of papules, which grew into vesicles and pustules, and they increased in number until

finally there was a general inflammation of the skin.

But now, as you see, below the knees the papules are no longer disseminated, but have grown together so as to present only a general superficial dermatitis, and the hardened exudation has encrusted the whole leg with a dry scaly envelope. In former times, and even now also, this was called an eczema; by which was meant any lesion of the skin in which there was a pouring out of fluid upon the surface. But the meaning of this term has now become enlarged, and it is applied to any inflammatory disease of the skin which involves the superficial layer of the corium, and results as a consequence in the formation of vesicles, papules, and pustules or scales. There are two varieties, the moist and the dry. And this is a moist eczema which we have here, the serous exudation having become dried into these dirty, grayish scales, which you see. These are very different from the scales of psoriasis, which are made up of the epidermis proper, and not formed by the desiccated exudations, as are these.

When we come to examine the parts above the knee, we find a very different appearance, and such as was at first presented by the parts below the knee, namely, a number of sparse and disseminated papules, vesicles, and pustules, with healthy integument filling up the spaces between them. Upon close examination I find that some of these papules occur just at the orifices of the hair follicles, and therefore we may conclude that the inflammatory process had its origin in these hair follicles. Other papules, however, show no connection with any hair follicles, but still they have such a characteristic, individualized appearance, as to suggest that they have their origin in an inflammatory process which has taken place in the sebaceous follicles. The disease in this man is really a follicular eruption, principally involving the sebaceous follicles which open into hair follicles. This communication of sebaceous with hair follicles, is very general over most of the body, but on the face and scalp they are mostly diffused and separated from the hair follicles. You see here the two stages of this eruption well illustrated. Beginning discrete, as on the thigh, and ending as on the leg, in an eczema. The same papular eruption, but less marked, is seen on the arms. But here there are no vesicles, and no pustules. So much for the character of the lesion.

But you should not be satisfied with the simple diagnosis of a follicular disease of the skin with an eczema of the legs. In the olden times great stress used to be laid upon the importance of diagnosing the papular from the vesicular, and the vesicular from the pustular eruption, as each was supposed to represent a distinct variety of the disease; and he was a good diagnostician who could tell with certainty the variety of the disease from the character of the eruption alone. But there is no longer that degree of importance attached to the precise character of the lesion, as there was formerly. For now we know that a cutaneous lesion is often not the whole of the disease, but simply a local manifestation of it.

The next important step in the study of this case is to find out the essential cause of the lesion which we see. The study of skin diseases is

especially valuable to every student of medicine, because they suggest to him those methods of examination which every scientific physician follows in making the diagnosis of all diseases. For you have a lesion, and very varied symptoms to study in both. In many cases you have the whole process of inflammation most perfectly illustrated in the progress of a cutaneous eruption. And a lesion produced by a parasitic disease of the skin, illustrates the course of the same class of maladies in other organs. In fact, the skin is a microcosm of pathology for the doctor, and therefore you should avail yourself of every opportunity for the study of cutaneous lesions. To find out the cause of the eruption is, as I have said already, the principal thing in the diagnosis of a skin disease. And for convenience, we may divide the causes into two classes, namely, external and those which arise within the body.

The external include atmospheric causes and all those which are material, and all which operate directly upon the integument. There is nothing in the history of this patient to suggest that this eruption was caused by any material or external application to the skin, such as heat, cold, or blisters, or by any peculiar atmospheric conditions; therefore we are obliged to refer it to some internal cause.

Possibly the syphilis suggests itself to you as a cause. But you must remember that this man was under constitutional treatment for a syphilitic ulcer when this eruption appeared, and the ulcer healed; and it is not to be supposed that another syphilitic ulcer would appear while one was healing under the influence of treatment. So we must exclude this as a possible cause. But, you may ask whether or not the eruption had anything to do with the treatment itself of the syphilitic ulcer. And this would be an extremely pertinent question. You should always think of the fact that drugs are themselves often the cause of cutaneous eruptions. Belladonna, for instance, sometimes causes a general erythematous eruption like that of scarlet fever, and copaiba an eruption which may easily be mistaken for syphilis. And in nervous and sensitive people opium may produce a nervous irritation of the skin which sometimes results in a troublesome eruption; and there are many drugs which cause neuroses in the way of hives. But there are two classes of remedies used very largely as medicines which are responsible for a good deal of cutaneous irritation, and one of these we find has been used here. I refer to iodine and bromine. These are remedies which you know are very largely used, the one in rheumatic and syphilitic diseases, the other in a very large class of neuroses. You will frequently, in the use of iodine, and still more with bromine, have occasion to observe on the patient an eruption of an erythematous vesicular character, which sometimes results in an obstinate inflammation of the skin. And inasmuch as both these remedies are employed to a large extent, it is important to bear this important action in mind. Now I believe that this man has been suffering from iodism, and the form which it has assumed in him is a dermatitis. But the commonest form in which iodism is manifested, is not by an integumentary eruption, but by an irritation of the mucous membranes. Some people cannot

take this remedy at all without becoming afflicted with an intolerable naso-pharyngeal catarrh, while others will suffer not so much from inflammation of the mucous membranes as from irritation of the external surface of the body. The form of eruption which iodine and bromine produce is a folliculitis, or an inflammation of the sebaceous follicles. And the commonest kind of lesion seen in persons taking iodine, but who are not very sensitive to its influence, is an eruption of acne, involving by preference the face, neck, and breasts. In some instances the iodism will produce such an eruption as we have here, which you will remember was follicular at the beginning, and which is more acute on the limbs than where the sebaceous follicles are more independent of the hair follicles. It is a vesicular and pustular eruption, with a tendency to run together and form a general inflammation of the integument. Sometimes it is a general eruption over the whole body, but as a rule it is confined to the extremities, and chiefly to the lower limbs.

I do not know why bromine and iodine should produce a sebaceous folliculitis, but it would seem that this is the particular channel by which nature seeks to rid the system of these substances. These medicines do not undergo any change in the circulation, but they are eliminated just as they are taken, and they are found unchanged in the urine and the excretions. And a large proportion of the remedies used are eliminated from the system by the kidneys, but some by the skin as well, and these latter cause cutaneous eruptions.

It is also of importance to bear in mind the possible means of preventing this irritation of the skin. From my personal experience, I have been led to think that by giving potassium iodide in combination with some other salt, or a diuretic, this effect might be prevented. I therefore give with it, usually, the citrate of potash or soda, or the bicarbonate of soda or potassium, or the muriate of ammonium, and I believe that the metal is thus more easily eliminated by the kidneys than when it is given alone. The same may be true, though, perhaps, not to the same extent, of potassium bromide when given for nervous affections. This tendency to produce a cutaneous irritation, sometimes becomes a very serious obstacle, in the treatment of such diseases as epilepsy for instance, where the remedy must be kept up for a long time; for some individuals are so sensitive to its action, that they cannot take it at all without immediately provoking a more or less general folliculitis. And I have seen patients rendered so offensive by the exudations, and so helpless by reason of the superficial ulcerations which accompanied the eruption, as to make it almost impossible for others to take care of them, or for them to move about themselves. Therefore, as a means of preventing this condition from following the use of bromide of potassium, I would suggest the same manner of combining it with a diuretic salt, as I use with the iodide. It has been further suggested that arsenic given with the bromide would prevent this complication; but I have not had enough experience in this class of diseases to express an opinion on this plan of treatment. This man, however, has been taking Fowler's solution with the iodide of potassium,

and it does not seem to have done him much, or any good. Yet I should think that it ought to have as good an effect when administered with the iodide, as with the bromide of potash; while I also think that the diagnosis of this eruption as caused by the iodide, is justified by the history of the case, and by the appearance, development, and distribution of the eruption. And now, having diagnosed the cause, we have, I believe, diagnosed the disease. And the diagnosis of the cause which has brought about the changes involved in the lesion, is, I think, the only true basis for the rational treatment of the disease.

However, it is not always in your power, as it is in this case, to apply the rational treatment, which mainly consists in removing the cause. Yet in a large number of the cases of inflammatory diseases of the skin, this rational treatment is possible to apply. In the case of parasitic eruptions, by removing the parasite we cure the lesion. And in the pathogenetic and autogenetic skin lesions, which are due to causes generated within the body, we can also apply the rational treatment in many cases, and remove the cause of the disease. In some individuals certain articles of diet in the process of digestion will cause a cutaneous irritation. You should know what these are, and withdraw them from the patient's use. Again, there are many eruptions which owe their origin to what is called the rheumatic habit of body, or to that peculiar condition of the system called gouty, which manifests itself in various forms of dyspeptic troubles. This class should be relieved by the same means that you would employ for the treatment of other rheumatic and gouty lesions. Again, we know that syphilis produces certain integumentary lesions, and also that the syphilitic poison is, to a remarkable degree, under the control of certain medicines. Therefore, to cure the specific lesion, you should use the specific remedy. So you see that, in a very large proportion of the maladies under observation, we have the ability to apply the rational principle of treatment by removing the cause.

We have put this patient on a diuretic, the citrate of potash, and we are treating the parts locally with a protective ointment for the purpose of allaying the severity of the inflammatory process, which was very active a few days ago. The diuretic is for the purpose of ridding the circulation of this irritating poison. But the most essential point in the treatment is to stop the iodide of potassium. In a week or ten days we will see what is the result of this treatment.

MEDICAL SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, February 28, 1884, the President, Dr. Tyson, in the chair. Dr. W. E. Hughes presented

Two Cases of Suppurative Nephritis.

In both of these cases the kidney lesion had been preceded by cystitis, in one of some months standing, in the other of more recent origin. In both of them there was a history of gonorrhea,

and in one well-marked symptoms of stricture of the urethra; in this case the cystitis seemed to have been originated by septic matter carried into the bladder on a catheter, although a tendency to inflammation had most likely been developed by the long-standing stricture. In one case the kidney lesion may have originated in emboli derived from a suppurating surface, though this is unlikely, from the fact that no such emboli were found elsewhere.

Case 1. A man, æt. 55 years, had locomotor ataxy for years. He had gonorrhœa, but following it no change from the normal in urination, so that it is scarcely probable that there was any stricture of the urethra. Six months ago, as the result of exposure, a cystitis developed, with the usual signs of frequent passage of urine containing large quantities of mucus and pus; there were no tube casts, and no more albumen than could be accounted for by the pus corpuscles present. After being under observation about two months, large bed-sores developed over the sacrum and trochanters. They soon induced a septicæmic condition, which rapidly produced death. At the autopsy the nervous lesions characteristic of locomotor ataxy were shown. The urinary bladder was dilated, its walls thickened, its inner surface crossed in every direction by bands of hypertrophied muscular tissue, the mucous membrane thickened and slate-colored. In the kidneys were numerous cone-shaped masses, in which the tissue of the kidney was broken down and infiltrated with pus, and the blood vessels filled with micrococci. The remainder of the kidney tissue appeared healthy. There were no abnormal appearances about the pelvis and ureter.

Case 2. A male, æt. 72 years, had several attacks of gonorrhœa, and symptoms of urethral stricture, lasting over 32 years. The stricture had been dilated several times, but during the six months before he came under observation it had been neglected, and had begun to grow troublesome. When first seen his urine was normal, and there were no signs of cystitis. He had been failing in health for some time, and was much troubled by a cough. Physical examination showed breaking down of the lung structure at the apices. A few days after coming under observation his nose bled so uncontrollably, that it became necessary to plug his posterior nares. Soon after this, his stricture almost preventing the voiding of urine, a catheter was passed into the bladder. The next day he complained much of pain and tenderness in the region of the bladder, and the urine, which was passed every few minutes, contained large quantities of blood, pus, and mucus. The acute symptoms were soon relieved, but the urine continued loaded with mucus and pus; in fact it was often so stringy that it was only with the greatest difficulty that he could pass it. It never contained casts, nor more albumen than could be expected when there was so much pus and blood. He died two months after he was first seen. The autopsy showed tuberculosis and disintegration of the pulmonary tissue. The kidneys were identical in appearance with those in case 1, with the addition that their pelves contained numerous particles of uric acid. The cavity of the bladder was small, its walls thickened and hypertrophied, the mucous

membrane dark red, thickened, softened, and thrown into folds.

Dr. Tyson said that the relation of bladder to kidney trouble was as yet pretty much guess-work, although it is certain that in a prolonged cystic disease suppurative interstitial nephritis will sooner or later arise. But rarely can we state from an examination of the urine that renal disease has supervened. He happened, however, now to have under his care two cases of cystitis with renal disease, in which it was comparatively easy to determine the presence of the latter along with the former, by reason of the presence of compound granular cells and fatty tube-casts in addition to pus. The character of the casts pointed rather to tubular nephritis than to the interstitial form, contrary to the ordinary belief with regard to these cases.

Dr. E. T. Bruen exhibited

A Specimen of Enlarged Bronchial Glands which had caused Intra-Thoracic Pressure.

These specimens were taken from the body of a man æt. 44, who had suffered for some years from chronic bronchitis. The bronchitis was probably due to his exposure to the fumes of coal in the gas works. There was no emphysema. The bronchial glands are deeply pigmented and much enlarged, forming in all a mass five inches long, three inches broad, and two inches thick. This enlargement surrounds the trachea, and slightly overlaps it anteriorly. A portion of the formation covers the origin of the right bronchus, but the left is also somewhat enclosed by the enlarged glands. In addition, many isolated bronchial glands will be found much increased in size.

The lungs presented evidences of chronic bronchitis and lymphatic irritation. The aorta is atheromatous and dilated. Heart normal. This specimen is exhibited chiefly to illustrate the possibilities of intra-thoracic pressure from this source. It will be seen that these enlarged glands occasioned serious pressure upon the lower portion of the trachea and the upper portions of the bronchi. During life there were many symptoms traceable to reflex irritation of the pneumogastric nerve, and there were also symptoms of pressure upon the œsophagus. The writer has published a detailed account of the symptoms incident to similar conditions in the *American Journal of Medical Sciences*, July, 1883. The cause of the enlargement of the bronchial glands in this case must have been the chronic bronchitis, although similar enlargements sometimes follow dilatations of the aorta. It is curious to note that degenerative changes in the lungs, or hepatization, were not observed.

Dr. Shakespeare said that the case was of interest from several points of view, one of which was the so great enlargement of the bronchial glands without either lung or any other thoracic disease. It was an extraordinary thing that the enlargement had progressed so far without any apparent primary point of origin in the tissues in which the lymphatic radicles take their rise.

Dr. Tyson was inclined to attribute their enlargement to anthracosis.

Dr. Bruen said that one of the latest writers upon bronchitis states that the reason for the intractability of chronic bronchitis is due to the

constant co-existence of lymphatic disease, thus inducing venous congestion, catarrh, etc.

Dr. G. E. de Schweinitz presented

A Case of Cystic Degeneration of the Fœtal Kidney, and said, I desire to present this evening an example of cystic degeneration of a fœtal kidney. The specimen was removed from an eight months' old fœtus brought to the University Museum by Dr. George Horn, of this city. The fœtus in question, in addition to this anomalous condition of its kidneys, presented also other interesting abnormalities, having, at the position of the posterior fontanelle, a large meningocele; further, an imperfect development of the external genital organs; and last, but not least remarkable, six fully developed fingers upon each hand, and a similar number of equally fully developed toes upon each foot. Upon opening the abdominal cavity both kidneys were found to present appearances of the one I exhibit to-night. It is enlarged, having a length of about $4\frac{1}{2}$ inches. and a breadth of about 3, or about the size or a little greater than the size of a normal adult kidney. The capsule can be detached with a moderate degree of ease, and the organ is surrounded with its usual envelope of peripheritic fat. Both upon the free and also the cut surface are seen numerous cysts, varying in size from a small marble to a split pea, or even smaller, each cyst having a moderately firm capsule, and upon incision discharging fluid contents. Very distinct lobulation of the kidney is a marked feature. It is perfectly plain that we have here a specimen of what is referred to by systematic writers upon pathology as congenital renal cysts. Rindfleisch speaks of kidneys of this sort usually producing death to the child either during birth or immediately after, by pushing the diaphragm up, and thus occupying space necessary for the movements of the lungs. He further indicates that the Malpighian corpuscles constantly prove the points of departure for these cysts, although degeneration in the continuity of a urinary tubule may also contribute in the formation of the cystoid change. Both Virchow and Rindfleisch consider "an intercalation of a mass of connective tissue between the renal calyces and renal papillæ" as a cause of this congenital cystoid degeneration. A rather hurried microscopical examination of this specimen reveals the following points: Nearly a total absence of any true renal structure, the greater mass of the organs being composed of connective tissue, through which are scattered numerous free nuclei; cysts, the walls of which are lined with a single layer of cubical epithelium, and in such which evidently arise from Malpighian corpuscles, the remains of the vascular tuft is sometimes seen, the wall having been drawn back from the vascular coil, as Rindfleisch puts it; quite large vascular channels and blood-vessels usually filled with blood corpuscles, and finally decided areas of fatty infiltration, the fat-cells having inserted themselves between the connective tissue. Further and fuller microscopical examination of the organ may probably discover other and different changes which have not been described. John Klein demonstrated renal cysts in an adult case to arise from degenerated Bowman's capsules, which contained cholestrum crystals, fat granules, and calcareous grains, or, as he expressed it,

"renal sand." Such conditions were not discovered in this case.

Dr. Tyson said it was remarkable how long persons with this congenital cystic trouble will live. Adults are found post-mortem with kidneys the size of a fœtal head, with cysts as large as marbles, and apparently no renal tissue left, conditions which have evidently existed for years.

Dr. C. B. Nancrede exhibited the specimens from a case of

Round-celled Sarcoma of the Superior Maxilla. Excision of that Bone with the Molar.

Thos. A., æt. 56 years, was admitted to the male surgical ward of the Episcopal Hospital in the fall of 1883, with what appeared to be an ordinary epulis of the back part of the right superior maxilla. On November 2, 1883, Dr. Packard removed the growth with the contiguous alveolar processes, and wiped out the wound with a 20-grain solution of chloride of zinc. Microscopic examination of the growth showed it to be a small round-celled sarcoma. It rapidly returned, so that in two weeks the growth was larger than when first removed. Dr. Packard removed this second growth with the outer wall of the antrum, the alveolar border, and most of the maxillary tuberosity. Wiped out again with chloride of zinc solution, all morbid tissue seemed removed; yet in less than six weeks it again began to fungate, and during the past week its enlargement can only be compared to that of a mushroom, the increase from day to day being readily perceptible. On February 27, 1884, the growth nearly filled the mouth and pharynx, and pressed upon the tongue so that deglutition was almost impossible. Accordingly, upon that day I proceeded to perform a formal excision of the upper jaw, removing also the right molar and part of the left side of the ethmoid. Owing to the efficient assistance of my colleague, Dr. Forbes, the hot iron was unnecessary, the internal maxillary being caught and tied with singularly little loss of blood.

To Prevent Pitting in Small-pox.

In the *Pharm. Central*. we read that for this purpose M. Schwimmer recommends the external employment of ointments containing carbolic acid or thymol.

	I.	Parts.
Carbolic acid	5	
Olive oil	40	
Prepared chalk	60	
	II.	
Carbolic acid	5	
Olive oil	40	
Starch	40	
	III.	
Thymol	5	
Linseed oil	40	
Prepared chalk	60	

In experiments carried out by the author on small-pox patients, treating only the face, it was found that the drying action set in from four to eight days earlier than in the parts of the body not operated on. The ointments form a protective covering, prevent the dangerous internal suppuration, and entirely prevent the formation of scars.

EDITORIAL DEPARTMENT.

PERISCOPE.

The Diagnostic Value of Severe Coryza in Chronic Bright's Disease.

Dr. A. Ostertag read the following paper before the American Rhinological Association (*St. Louis Med. and Surg. Jour.*, February, 1883):

Gentlemen of the Association: I must begin my paper with an apology, on account of the very short time that was allowed to me for working it out, as the solicitation of our honored president reached me only two days ago; but the newness and extreme importance of the subject will be my best excuse for bringing it to the knowledge of the Association, even in this very imperfect form.

About nine months ago, I saw in a number of the *Cincinnati Lancet and Clinic*, a very able paper by Arthur V. Meigs, read before the College of Physicians and Surgeons of Philadelphia, entitled "Clinical Observations on Albuminuria," which he bases on the considerable number of sixty-two cases observed by himself and his father during a period of nine years. Leaving aside his other statements, which are foreign to our purpose, I will give his observations on the subject in his own words, as he most emphatically expresses himself thus: "Another symptom of Bright's disease, which I have frequently noticed, and have never heard described, is coryza of such a character that it gives rise to a very much greater distress than any ordinary cold in the head; with this there is not much discharge from the nose, but the patient complains that he can get little or no air, except through the mouth, this being accompanied with excessive oppression, much more than the condition would seem to warrant. This symptom was first called to my attention by my father, Dr. J. Forsyth Meigs, in a case we saw together nine years ago."

A second short notice which attracted my attention to this subject, I find in the March 10th number, 1883, of the *Brit. Med. Jour.*, by Andrew Clark, under the head of "Renal Inadequacy," by which he understands a very early incipient stage of Bright's disease. His words in relation to our subject, speaking of the several types of patients, are as follows: "They are a people, as a rule, who are always catching cold, and who, when they catch cold, come into the category of the first characteristic, namely, that they do not get rid of the cold; they are the people who without apparent reason and without other existing disease, get pneumonias, pleurisies, pericarditis, and the like." The remarks, gentlemen, I have to offer you on these two quotations are few, but in my opinion they are of the greatest practical importance. We see from the statements of these two men, that there must be some solid foundation in their descriptions, as they so essentially coincide. But of the full importance of this symptom, we only become aware when we reflect upon the enormous spreading and increase of Bright's disease at present in our own country; also on the fact, that the most distinguished clinicians, both in this country and

abroad, confess that in the whole nosology there is no disease of a more insidious beginning, and sometimes continued latently even to the rapid, quite unexpected end, than Bright's disease. This symptom, severe chronic coryza, I find not mentioned in any of our standard works; even Bartels, in Ziemssen's *Cyclo.*, who is a most close observer, and has made the study of kidney disease a lifetime specialty, does not speak of it; indeed, all we learn from our most trustworthy guides is, that we, in general, cannot even suspect the lurking enemy, until it is too late.

As in the present state of our science we are very far from a right interpretation of reliable premonitory symptoms of a good many dangerous diseases, but especially in Bright's disease with its very insidious beginning, each contribution of well-observed clinical facts to clear the diagnosis of this obscure subject, must be welcome, when it directs our attention to a conspicuous symptom which we so frequently meet, but which until now we were unable to interpret rightly. The more seems this to be the case in a disease, which, as we all too well know, must have reached at the present time an hitherto unheard-of extension, measured by the standard of advertisements of sure cures for kidney disease, which strike our eye in every newspaper of this country. It is a very plausible and ingenious remark, that the increase of this disastrous disease finds its explanation, for a greater part, in the manner of living our modern life, and on this point, gentlemen, allow me again to quote a short passage from Meigs.

"It cannot be proved by statistics, and yet I think there is strong ground for believing, that the proportion of deaths, caused by affections of the kidney, is greatly on the increase. The tendency of modern life seems to be such, that a larger number of deaths are caused by degenerative process, and less by acute disorders. In former times, children were less delicately reared, and a larger proportion of the frailer ones probably died from exposure and want of care; now beginning at childhood, and continuing up to old age, we are much more careful to avoid exposure, and more self-indulgent, at least as far as our bodies are concerned. Who, in modern times, except the professional athletes, would undertake the physical labors of the Emperor Charles V. of Germany, of whom Motley says, that he was able to tell, at a time when all journeys were on horseback, or by boat, 'of his nine expeditions into Germany, six to Spain, seven to Italy, four to France, ten to the Netherlands, two to England, as many to Africa, and of his eleven voyages by sea!' Nowadays, the majority of city men are in their places of business all day, and take but little exercise, eating as much and as rich food as in former times, and drinking not a little withal. The natural and necessary consequence follows, that after years of this kind of life, the excretory organs degenerate; first, the kidney, which is the common sewer of the body, and like the heart, has to do continual work from the hour of birth until the hour of death. It is a common thing, in

modern life, to see a man naturally robust and gifted with a large appetite, become more inert as years go by, when he will gradually give up his active exercise, until finally he takes none; still the eating and drinking go on, and he becomes fat and sluggish; finally he loses health, and then examination shows that degeneration is beginning in the kidney. I could instance several cases of the kind, but my space will not allow me."

My object in the presentation of this new subject, is to draw the attention of the Association to the study of this symptom in relation to Bright's disease, so as to give it its proper place in the symptomatology of the latter malady, as by keeping it in view, we might in many cases where, according to our two above-mentioned authors, it seems to belong to the early and curable stage of this later on becoming quite hopeless disease, be able to save many a valuable life, and so become true benefactors to mankind.

It needs the observance of a great number of searchers, as the field of one man, be it ever so varied, is too limited to make it fruitful for the profession at large.

I request you, therefore, not to lose sight of this symptom in your practice, and to report your experience at our next meeting; for, as you well know, to promote the science of medicine, we must not only be devoted students and close observers, but we must also learn to draw logical conclusions from our observations, and give them the right place in the nosology.

My own experience on this subject is, at present, too limited to speak with great confidence, but I can adduce at least one case, which I have had under observation for some time, which fully proves the correctness of this statement; and two others, to which my attention but lately has been directed, seem to point to the same deduction.

To impress upon you once more the importance of my subject, I will close it with one of the summary paragraphs, as stated by Meigs, "That severe coryza is a complication or accompaniment of Bright's disease, and has a diagnostic value."

Scarlet Fever: A Remarkable Series of Cases, and a Noteworthy End of It.

Dr. E. Diver makes this interesting report in the *Lancet*, January 19, 1884:

On November 21, 1880, my attention as medical attendant to a school of about 250 children was called to a girl with a rash, which I found to be that of scarlet fever. No information was forthcoming as to whence she got the disease. She was removed to the infirmary—a building in all ways isolated from the school; the room in which she had been temporarily placed was scoured and cleansed, and a good lookout amongst the children was kept up. In ten days another girl had scarlatina, and she was removed to the companionship of the former. Three weeks passed with no fresh case, but on the twenty-fifth day another girl had to be taken to the infirmary. We were free again until the twentieth day, when another girl showed signs of scarlatina, and was removed like the three others. In seventeen days more, three cases occurred together, all girls; in fifteen days from these, another girl; in twenty-eight days more, two girls; in ten days after these,

another two; and in twenty-three days more came the thirteenth girl, and the last of the series. After the tenth girl got ill, the disease showed itself in one of the boys, and I wondered whether we were now to have a regular epidemic. But time proved that this boy was the only one to be ill, and he turned out to be the brother of the sixth girl. It was proved, too, that his mother had seen and kissed him after having gained an interview with her convalescent daughter forty-two days after this girl's illness began. Ten days after the mother's visit, the boy complained of a sore throat. After each removal of a patient or patients to the infirmary, the interval was anxiously watched, and once or twice we began to think we had done with the disease. But on being disappointed, we were puzzled to account for its recurrence. There was no probability of infection from the old cases, and we knew of no scarlatina elsewhere in the neighborhood. The limited spread of the disease was against its being brought into the school with any sort of food, and all the water was pumped from a deep well. The drainage was almost entirely by earth closets, and there was no overcrowding, the dormitories being ample and well ventilated. At length I examined the water cisterns. These were situated in the roof of the building, and I traced each pipe going from them. One I found went to a dormitory, and terminated in a tap from which the girls on going to bed could draw water; and I ascertained that all the sick girls had drunk from this source; probably many others had done so, too. The overflow pipe from the same cistern had its orifice of discharge over a gully in the corner of a paved yard, the orifice being parallel with the gully, and an inch or two above it. Side by side with this pipe, and terminating at the same level, was another. This other led down from a slop sink, and conveyed the night urine from the girls' dormitory into the drain. These pipes had been in use for two years, as had the portion of the school wherein the disease occurred, and to which they belonged. The drain, which was trapped below the gully by a Doulton's siphon, conveyed also rain and bath-room water to the larger drain beyond, and the gully-grating was somewhat furred with urine salts. Now, whether the structural arrangement described had anything to do with the scarlatina or not, it was clearly a bad one, and open to grave suspicion. The overflow pipe was therefore cut away to half its length on March 26, 1881, nine days from the last case of illness, and was made to discharge itself upon a low roof hard by, thus dissociating it from the urine-pipe, which in its turn had its extremity cut into the shape of a jug spout. After this no case of fever happened.

Owing to the circumstance that no ordinary cause of the disease was discovered, as contagion or fomites, it seems probable that there was some less common cause for this series of cases of scarlatina. If so, either it was one of which I am not cognizant, or it was connected with the juxtaposition of the two pipes. In the latter case, the overflow pipe appears to have conveyed to the cistern, upon Tobin's principle of ventilation, air, with all that air may carry, and the chemical results of some decomposition of urine and perhaps other fluids; and by this contamination the water was made

equal to the production of scarlatina at uncertain intervals, depending partly upon the receptivity of those who drank of it. Arguing upon this, one's question next is, What is this chemical which was conveyed from the urine pipe, or perhaps, but unlikely, from the comparatively harmless drain below? For, so far as can be told, no ordinary scarlatina germs were present, the facts appearing to favor the theory that scarlet fever may be generated *de novo*.

As to the case of the boy, he had no means of getting at the water which the girls drank from, and I know of no way in which it was probable he took scarlatina, except it be admitted that his mother brought it to him. But if she did, the period of apparent incubation was of unusual length. It may be, however, that the poison lay in his clothing for a day or two, and so the ordinary period of incubation may not have been transgressed. But if the boy's mother did not bring the disease to him, and the girls did not get it by means of the pipes, then the facts given exemplify what is undoubtedly true sometimes, that with all the circumstances seeming to favor a given conclusion, that conclusion is not correct, because an important something else has needed recognition. Query: In the present case, is there this something else? And if there is, what is it? But if not, what was the seed of mischief in the water?

Auscultation of the Œsophagus.

The *London Med. Times*, January 19, 1884, says:

Attempts have frequently been made to establish some trustworthy means of diagnosing affections of the œsophagus and stomach by the aid of auscultation. The act of swallowing of necessity gives rise to certain sounds, and it is to the correct interpretation of these that we must look before making use of any modification of them in determining morbid conditions. A recent discussion upon the subject in the *Berliner Medicinische Gesellschaft*, introduced many points of interest, both from physiological and clinical points of view. The idea that deglutition is chiefly affected by means of the action of the constrictor muscles, and of the peristaltic movement of the œsophagus, has lately been opposed by a theory propounded by Kronecker and Meltzer, who divide the act into two parts, of which the first consists of the rapid injection of the masticated food or fluid through the œsophagus, and the second in the further injection of the food through the cardiac orifice by the contraction of the lower segment of the œsophagus itself. The act is a very rapid one. The every-day experience of the sensation of swallowing may certainly be held to corroborate this theory. Hot or irritant fluids invariably make themselves felt at the upper and lower parts of the œsophagus only, a result probably due to the fact that it is at these points that they are forcibly squeezed against the mucous membrane. If the theory is correct, it is there also that they remain for a few seconds at rest. The pathological appearances produced by corrosive irritants are likewise most marked at the same points. The sound produced by these two spasmodic movements, by which the food is thus "squirted," so to speak, down the œsophageal tube, may be dis-

tinctly heard on listening at the side of the ensiform cartilage. A first sound, coincident with the upper œsophageal contraction, is described as resembling that produced by discharging a syringe-full of air under water; the second, following it after an interval of about seven seconds, is said to be somewhat similar, but coarser in character, and corresponds with the opening of the cardiac orifice and the spasmodic injection of the food through it into the stomach. Unfortunately for the diagnostic value of these auscultatory signs, their occurrence is not absolutely constant in healthy persons, although present in a very large majority of the cases examined. Neither is there perfect agreement between individual observers as to the character and relative intensity of the sounds produced. Almost identical noises are heard over the stomach when the œsophagus is at rest, and they may even be set up by electrical stimuli. The subject is one which deserves attention, and especially in relation to affections of the œsophagus, which have, from the earliest days of medicine down to the case of the late Comte de Chambord, presented insurmountable difficulties to the most able diagnosticians; but until a standard can be determined to form a physiological starting-point, the efforts to interpret the auscultatory phenomena in the œsophagus will remain as futile as heretofore.

Calculi of the Pancreas.

To the Pathological Society of London (*Brit. Med. Jour.*, January 12, 1884), Dr. Norman Moore exhibited three specimens of calculus in the pancreatic duct.

1. A pancreas with a dilated duct, containing numerous irregular calculi of carbonate of lime. The duct was most dilated near the head. There were stones in all parts of it, but it was nowhere completely closed. The patient was a man, aged 40, who died of diabetes. The bile-duct was pervious, and there was never any jaundice.

2. A pancreas, with its main duct slightly dilated, and containing a calculus of irregular shape, around which was a large abscess in the head. This abscess pressed upon the orifice of the bile-duct sufficiently to produce great distension of the gall-bladder. The patient was a man, aged 43, who died in St. Bartholomew's Hospital of an attack of pleurisy following gouty symptoms.

3. A pancreas, with great dilatation of the duct throughout its length. Near the orifice the duct was blocked by a small calculus of irregular shape. The whole gland was very hard, and, to the naked eye, showed a great increase of connective tissue. The papilla in the duodenum was enlarged, and the hardened tissue of the pancreas had constricted the bile-duct, so as to cause complete obstruction. The liver was of a deep green color, intensely hard, and with general dilatation of its ducts, which everywhere contained watery bile and bile-gravel. The glands in the hilum of the liver showed no new growth, and a careful search showed none anywhere in the body. Microscopic sections of the pancreas showed an extensive increase of connective tissue. Many bands of old growth traversed the gland, and there were patches of nuclei of a more recent connective tis-

sue-growth. Some normal acini were visible, but in most, the gland cells were more or less atrophied. No cells like those of the acini were to be found beyond their proper limits, nor were there any other signs of carcinomatous growth. The morbid change was of the same kind as that found in the liver of cirrhosis. Dr. Wickham Legg had shown that dilatation of the hepatic ducts would produce a connective tissue increase throughout the liver. In this pancreas a gradual dilatation of its ducts, due to the occlusion of the main duct by the calculus, was probably the cause of the new connective tissue growth throughout the gland. Cirrhosis of the pancreas, as a result of calculus, had not, he believed, been described before. The patient was a man, aged 64, who was admitted to St. Bartholomew's Hospital in July, 1883, and died in October. He had been ill for a month, and jaundiced for three days on admission. His liver was not then enlarged, but on August 13th was distinctly increased in size. During his illness, he had many attacks of vomiting, but no colic. Dr. Moore had exhibited two specimens of abscess of the pancreas due to calculus, at this society in 1882, and this was the only one which had occurred since in the post-mortem room at St. Bartholomew's. In the three cases of pancreatic calculus now shown, there was jaundice in only the last, and colic in none; but, in all three, attacks of vomiting were noticeable clinical features.

Rupture of Intestine.

Dr. A. McLean reports this case in the *Brit. Med. Jour.*, February 9, 1884:

W. H., aged 32, fell from a tree, a distance of twenty feet, on December 24, 1883, about four o'clock in the afternoon. He had dined at one o'clock. He fell flat on the body, and was found by those who went to his assistance lying on his belly. With help, he walked two hundred yards to a truck, on which he was taken home. He did not lose consciousness. When seen at 5 p. m., he was suffering from pain, chiefly over the region of the bladder, in the left groin, and in the right flank. There was an abrasion of the right elbow, and his lips were cut. There was very little shock. He said that he wanted to pass urine, but could not do so; he had passed urine before ascending the tree. A catheter was passed, and about a pint of clear straw-colored urine withdrawn. He was ordered to have thirty drops of tincture of opium every three hours, and ice and milk. At 7 p. m., he was found lying over the edge of the bed vomiting, and had thrown up his dinner partially digested, and containing a few clots of rather bright-colored blood. As he had a good deal of abdominal pain, a quarter of a grain of morphia was given subcutaneously, and a bran poultice applied to the abdomen. The temperature was 99°; the pulse was rather frequent and hard. He could take a deep inspiration, which caused pain only in the right flank. At 10 p. m., he had expectorated some mucus tinged with blood, but had no further vomiting. He could bear firm pressure all over the abdomen, but there was tenderness in the left groin. About three ounces of clear urine was drawn off by the

catheter. Temperature, 100.6°; pulse, 100; respiration, 24; he was very cheerful.

December 25, 11 a. m. He said he felt comfortable. He could bear firm pressure on the abdomen; there was tenderness in the right flank and left groin. Half a pint of strong-smelling dark brown urine was withdrawn by the catheter. He was ordered to continue the opium-mixture, milk, and ice. Temperature, 100.2°; pulse, 93; respirations, 26; his breathing was shallow, but he could take a deep breath. At 5 p. m., there was no change in the breathing; half a pint of urine was withdrawn by the catheter; the abdomen was rather distended and resonant; pain was not increased. I left him feeling comfortable and cheerful. I did not see him again, but was told that about 10 p. m. he complained of pain in the abdomen for about an hour, and then was easier. He was cheerful and comfortable up to 3 a. m., when, after a few deep inspirations, he died.

Post-mortem examination thirty-seven hours after death. The abdomen was distended and discolored; there was considerable peritonitis, with lymph very thick in patches on the small intestine in the left iliac region; much congestion of the intestine, which was ruptured at about the junction of the ileum and jejunum, opposite its mesenteric attachment; the rent would admit the introduction of three fingers. There was no other lesion. In evidence given at the inquest, it came out that a piece of wood about three inches by five inches was found under the body of the man; this would probably account for the rupture.

A Case of Mistaken Sex.

Dr. Wm. P. McGuire reports this case in the *Med. News*, February 16, 1884:

A B., thirty-five years of age and in good circumstances in life, consulted me on January 12, 1884, in order to have the sex to which she belonged determined. She was, to all outside appearances, a fairly-formed woman about five feet four inches in height, with long hair curling down her back. Her voice and features were effeminate, and her demeanor was modest. From birth her dress had been that of a woman. All of her associations had been with women, and her business in life that usually followed by that sex. There was no hair upon her face.

I found upon examination that the conformation of her thorax was similar to that of a woman, and that her breasts were developed similarly to those of a young girl. The nipple was erectile. Her arms, hands, and lower limbs were those of a man. There was a small penis in the natural position about three-quarters of an inch in length, with a well-formed glans and prepuce. It was capable of erection, but had in the glans no aperture. Following from the base of the penis backwards was a sulcus about one-half an inch in depth and two and a half inches in length. Lying upon each side of this sulcus, and each enclosed in separate scrotums, were two well-formed and developed testicles, each attached to a moderate-sized spermatic cord, the whole conformation resembling the vulva of the female. There was no opening in this sulcus, but just at its posterior termination was an opening one-quarter of an inch in diameter, which was the external opening of

the urethra, extending backwards and upwards into the bladder. No prostate gland was found. She stated that all of her proclivities and desires had been masculine, and admitted that occasionally in her sleep she had pleasurable sensations, followed by an ejaculation of a white fluid from the opening of the urethra, which was, of course, an ejaculation of semen. There was no trouble in determining her sex. She was advised to change her dress to that of a man, and to attempt to have by a plastic operation a new urethra made from its termination in the perineum, along the sulcus to the glans penis, in order to effect more convenient urination, as she is now obliged to do so in the sitting posture.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

Medical Annals of Baltimore from 1608 to 1880.

By John R. Quinan, M. D. Paper, 8vo., pp. 275. Price \$1.00.

In a very painstaking manner the author of this volume has collected everything of interest about the profession in the city of Baltimore, and deserves great credit for his labors. It was prepared by request of the Medical and Surgical Faculty of Maryland, as a memorial volume, in honor of the Sesqui-Centennial of Baltimore, October, 1880. It comprises:

1. A chronology of events connected with the progress of medicine in Baltimore from 1608 to 1880.
2. A biography of Baltimore physicians, to which is appended a record of their literary contributions.
3. A subject-index to the literature.
4. A record of public services, military, civil, and medical, performed by Baltimore physicians from 1608 to 1880, in the city, state, and national governments, with statistics of the charitable and public institutions of Baltimore.

It is of interest not merely to the physicians of Baltimore themselves, but to their families and descendants.

Orders, enclosing the required amount, sent to the librarian, Dr. E. F. Cordell, 122 West Fayette street Baltimore, will be filled as soon as received.

Contagious and Infectious Diseases: Measures for their Prevention and Arrest. Small-pox, Variola; Modified Small-pox, Varioloid; Chicken-pox, Varicella; Cow-pox, Variola-vaccinæ; Vaccination; Spurious Vaccination, etc. By Joseph Jones, M. D. Baton Rouge, 1884.

This closely-printed work of 410 pages, is characterized by the usual thorough method of its author. His extensive reading and enthusiasm of

investigation appear on every page. The history and pathology of the class of diseases of which he treats have never been more exhaustively handled. Several very rare early tracts on vaccination are reprinted in full. The unfortunate results of many of the vaccinations during the civil war are noted and explained. The relations of syphilis to vaccination are stated, and many alleged cases are critically examined. In discussing the relative merits of humanized and bovine virus, the merits and disadvantages of each are fairly and fully stated. As a hand-book of reference on these allied topics, it is the most complete we have seen. For copies, address the author, New Orleans, La., as it is an official publication of the State Board of Health.

The Relation of Animal Diseases to the Public Health, and Their Prevention. By Frank S. Billings, D. V. S. 8vo., pp. 448. D. Appleton & Co., New York.

This volume is divided into three parts, the first of which treats of the nature and prevention of various diseases of domestic animals, especially trichiniasis, hog cholera, tuberculosis of cattle, anthrax, and glanders. The author does not discuss the treatment, but the prophylaxis only. The second part is on the history of veterinary medicine; the third on veterinary education.

While the writer is evidently well acquainted with his subject, he fails to present it in an agreeable manner. Although his preface intimates that his volume is addressed to the educated public, it is filled with the most elaborately long and learned technical terms. What sort of a sentence is the following for a popular treatise: "If a trauma formed the atrium of the inficiens, we may remark on the locus infectionis hyperæmia and inflammation!!" Yet there are hundreds of passages just as pedantic as this.

His remarks on medical education, which he goes out of his way to criticize, are dogmatic in the extreme, especially for one who is not himself an M. D. He has a plan to shut up all the medical colleges in the country, and open one for free medical education at the public expense! There is a disease which they call out West "the big head," from which the writer seems to suffer.

—Wigglesworth defines mania as a disease involving disorder of the relational elements of mind, and of a greater or less number of these, according to the intensity of the disease; in other words, what we clinically know as mania has for its material substratum an affection, functional or organic, of the higher co-ordinating plexuses of the brain.

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A SUGGESTION ON MEDICAL EDUCATION.

That there are more doctors to the population in the United States than anywhere else, is a matter of common knowledge and public statistics; that, on the whole, these doctors are the worst educated of any in the world, is a truth which those who are in a position to judge will concede, and which might be assumed from what everybody knows of the facility of obtaining degrees, or of the slight necessity of obtaining them at all.

The result of this might be expected to be that the community at large would begin to lose its faith in doctors. But not so, thinks an enterprising writer on this subject, Dr. Alexander Hutchins, of Brooklyn.* He maintains that in spite of such facts—that an important daily paper openly asserts that “expert testimony no longer occupies the place in public esteem it once held,” when a well-known lawyer charges in open court that “you could buy the most honorable members of the medical profession as you could horses in the open market,” and when a judge passes by the claims of the alienists and appoints a dermatologist and a gynecologist as a commission to examine a man on a lunacy writ—yet the fact still holds that the attitude of the community to the profession is eminently docile and receptive.

All legislation worth obtaining can be obtained; the family physician is as much a power in the household as ever; and the gullible public puts down its gullet about eighty million dollars' worth of quack medicine, and as much more of the authentic stuff annually, all on the faith of what it thinks is “medical advice.”

Nevertheless, he warns us that this happy state of feeling may not be perennial. Some demon may whisper doubts in the public's long ears, and then it will behoove the doctors to be on the watch. It may be prudent that they have an education befitting their position, and Dr. Hutchins' suggestion impresses us as a wise and a timely one. It is very simple, and we give it in his own words:

* *The Reciprocal Attitude of the Medical Profession and the Community. The Anniversary Address before the Medical Society of the State of New York, February, 1884.*

"One may be justified in parting company with the practice of the period, and demand, in the interest of medical science, for the purity of medical art, for the maintenance of professional honor, and for the protection of the community, that the teaching and degree-granting authorities be *not* one and the same. Let the community, through its law-makers, legislate into control an acceptable judicial body, in which shall rest the decision of the fitness of candidates to assume the responsibilities, enjoy the honors, and reap the emoluments of professional life, and the sharp contests of dogmatic rivalry, the destructive wiles of medical harpies, and the weakening competition of medical schools, would be rapidly equalized in the 'survival of the fittest.' Fitness is, in some sense, a test of honesty, and this safeguard the community has a right to demand."

This may not be entirely new; it is not without precedent; and so much the better. We commend it as a sound plan, worth adopting in every State, which in the simplest manner possible would regulate the whole question of medical education.

NEUROSES OF THE VISCERA.

We are oftentimes called upon to treat cases that puzzle us very much, since it seems very difficult to account for the symptoms that present themselves, by reasoning upon any of the ordinarily taught doctrines of pathology. We will, for instance, be confronted with a patient who offers many of the symptoms of serious disease of the stomach, or of the bowels, or of the kidney, liver, or bladder, and yet upon careful physical examination we fail to detect any organic disease, and in time these trying symptoms vanish, and the patient complains of them no more.

Such cases are very trying to the physician, because he is at a loss to account for them, when, upon examination, he utterly fails to elicit the evidence of such pathological conditions as would suggest their *raison d'être*.

Some time ago we referred to a condition of excessive pulsation of the abdominal aorta, noted more especially in women, which had oftentimes given rise to the suspicion of aneurism, when in reality there was no diseased condition present, the trouble being altogether functional, and nearly allied to what is best described as nervous

palpitation of the heart. Dr. Clifford Allbutt (in this year's Gulstonian lectures) leads us further on in this direction, and describes what he is pleased to term the "*neuroses of the viscera*," which, while purely functional, yet generally simulate grave organic disease of the organ affected. Gastralgia, enteralgia, nephralgia, are all conditions allied to neuralgia of any other portion of the body, and yet so little written about that we are puzzled when a case comes to our notice. Ordinary neuralgia of the face is sometimes so severe, to use a homely phrase, that the whole system sympathizes, and for a time the afflicted person is really very sick, though there may be no organic disease; so with neuralgia of the stomach, of the bowels, of the kidney, or the liver, we may have the same reflex phenomena. The important practical lesson to be drawn from Dr. Allbutt's excellent lectures is that when we have a train of symptoms, apparently emanating from some organ, which, upon examination, we find to be healthy, we are to look upon it as a neurosis or a functional nervous derangement, due to some condition for which we must search. It may be a depraved condition of the general health, or it may be due to psychical causes, as mental depression from one cause or another; but whatever may be the cause, we must find it out and remove it, else we will continue to be puzzled by these *feigned* organic diseases.

THE MEDICAL ASPECTS OF SEA VOYAGES.

The English medical journals have been lately saying a good deal on the question of life at sea from a medical standpoint, both sides of the question, as is usual on almost all questions, having its advocates. There are some who claim that sailors are not particularly long-lived men, and hence they argue that sea-life is not particularly conducive to health. Their opponents point to the proverbially-reckless life of sailors when on shore, which they very justly argue is well calculated to counteract the benefits to health that are conferred by sea voyages. Again, the discomforts sometimes experienced on vessels are used as ar-

guments against the advocacy of this therapeutic resource. The truth seems to lie in a careful consideration of the cases that are likely to be benefited by sea voyages and the reverse. There can be no doubt that sea air is to most persons a tonic, and a most potent one; while it is equally recognized that to some it acts in just the opposite way. When a man, extensively engaged in business pursuits, is run down by too close application, mentally and physically, to his business, there cannot be devised a better tonic than a sea voyage; for not only is he exposed to the constant inhalation of a pure, bracing, and tonic atmosphere, but by the very isolation which it entails, his mind is relieved of its business worries, while each day brings with it merely another period of repose and quietude in lieu of the renewed business anxieties engendered by each new day at home. Even the busiest men are willing to be lazy and idle when under the subtle influence of a sea atmosphere, and day succeeds day in blissful and rejuvenating idleness. To the jaded and over-worked body and mind, a few days at sea will prove far more efficacious than all the drug tonics in the world.

NOTES AND COMMENTS.

Ulceration of Bowel, with Copious Hemorrhage, Cured by Castor Oil.

Dr. Hildyard Rogers reports this case in the *Brit. Med. Jour.*, February 16, 1884:

Miss G., aged twenty-eight, was first seen on March 22, 1883. She had been suffering since the beginning of March from diarrhœa, accompanied by hemorrhage. Her father, mother, one sister, and one brother, are living and healthy. One brother died, at adult age, of phthisis. She was looking plump and well nourished, and had no pain. The tongue was clean, but red. Nothing abnormal could be made out on abdominal palpation. The heart and lungs were sound. There was no cough. The urine was normal. The rectum was slightly dilated. She had internal piles, which had bled occasionally, but not to any extent. She had always been regular and healthy. She had, since the beginning of March, been passing daily two or three loose motions, containing shreds of mucus and dark clots of blood.

Temperature (morning), 101.3° Fahr.; pulse, 120. Between March 22 and May 9, the diarrhœa steadily increased in severity, and the blood changed from dark clots to a bright arterial color. At the latter date, the motions consisted apparently of little else than blood and mucus, and the bowels were acting ten or twelve times in the twenty-four hours. There was at times troublesome vomiting, and steady loss of flesh, but never during the course of the illness any pain, other than that arising from bed-sores and from the patient's general weakness. The most careful examination, as well as the character of the motions, showed that the blood did not come from the internal piles, or from the lower part of the bowel. The temperature ran an irregular zigzag course, rising at times as high as 103.4° Fahr. The pulse seldom varied, and was nearly always soft, compressible, 120 to the minute. There was never any tympanitis.

During this period (seven weeks prior to May 9) she was seen in consultation with Dr. Ogle, Dr. Bird, and the late Dr. Hilton Fagge, all of whom concurred in the diagnosis. Opium, belladonna, bismuth, cerium, logwood, nitrate of silver, etc., were found utterly useless. Suppositories and injections of various kinds were tried without avail. By May 9, she was reduced to a very emaciated condition, and was too weak to turn in bed. Food was taken with great difficulty, owing to the constant vomiting, and the patient's condition appeared almost hopeless. On May 9, she was seen by Dr. Gibson, of Newcastle, at whose suggestion drachm doses of castor oil each day were tried. Within twenty-four hours after taking the first dose, she passed a feculent motion. The castor oil was repeated eight times up to May 20, and after this only occasionally. The temperature fell in forty-eight hours from 103° Fahr. to 99° Fahr., and never rose again above 100° Fahr. The diarrhœa rapidly abated, the stools becoming feculent and healthy. No blood was passed after May 18. The patient rapidly regained flesh and strength, and, although bearing traces of the severe illness and physiological starvation which she had undergone, was able to go to the sea-side in July. In September, a slight relapse took place, but was easily cured by the same treatment; since that time, the patient has remained in good health.

Foot and Mouth Disease in Human Beings.

A very remarkable epidemic of aphthous sore throat has occurred in Dover, England, recently,

and so far it seems to have been connected with foot-and-mouth disease in a dairy. The outbreak has been very carefully investigated by Dr. Robinson, medical officer of health; and though his inquiries are not yet completed, he has laid a report on the subject before the Town Council. From the first, suspicion attached to a certain dairy in the town, but it soon became evident that all the milk sold there was not implicated. The dairyman, however, received milk from other dairy farms than his own; and at one of these, situated in the country, it was found that the cows had suffered from foot-and-mouth disease. Not only so, but amongst the customers of the Dover dairyman those who partook of cream alone were especially affected; and it transpired that the only cream sold at the Dover establishment was that received from the country dairy alluded to. Another circumstance connected with this dairy was that some fourteen persons who did not obtain milk from the Dover dairyman, but who had their supply from the affiliated country dairy, were affected. In all, we hear of 144 attacks; 130 receiving their milk from the Dover establishment directly. The special influence of cream, as conveying the *materies morbi*, was shown by the fact that the proportion of attacks in adults, as compared with children, was large, and many adults who took no milk had partaken of cream in their tea—some indeed doing so at the houses of friends on a single occasion only. The symptoms of the sufferers were shivering, followed by headache and fever, pains in the limbs, parched lips, and a vesicular eruption on the throat. In some cases the tonsils were enlarged, and in others they suppurated, the process being accompanied by enlargement of the glands. As already stated, the inquiry is not completed, and we are promised a further report from Dr. Robinson. When this is received, we shall doubtless be able to learn the precise proportion of attacks to persons using the implicated milk and cream, as also the number attacked in the town. That some should be attacked who did not partake of the milk, in no way invalidates the theory as to the source of the infection. We expect it will be shown that in such attacks personal infection may have come into operation, and that they were secondary cases, this question being essentially one of dates. That the milk of cows suffering from foot-and-mouth disease is capable of producing some definite affection in the human subject, has often been shown; but never, so far as we are aware, has there been an outbreak on so large a scale as that which is being investigated by Dr.

Robinson. The occurrence is therefore one which has very special interest both to the medical and the veterinary professions.

Persistent Flaccidity of Uterus after Labor.

To a recent meeting of the New York Obstetrical Society (*N. Y. Med. Jour.*, April 5, 1884), Dr. Perry related the case of a lady, thirty-eight years of age, the mother of five children, the youngest being four years old. She had complained, since the birth of this youngest child, of bearing-down pain and inability to stand or walk, from the great pressure and weight in the pelvis. Menstruation occurred every three weeks, and lasted, with scanty flow, seven and eight days. On making a vaginal examination, he found the cervix in its proper position, but very short and flaccid, and, extending around it in a circular direction, a soft mass, apparently the result of a pelvic inflammation. On conjoined manipulation, the mass appeared very shallow, but nowhere could he find the fundus of the uterus. A sound was introduced, which penetrated but two inches. Not doubting that it was within the uterine canal, he essayed a little force, and with this was able to penetrate to the depth of eight inches, and, while doing so, found that the mass in the pelvis disappeared. He had, indeed, while forcing the sound upward, carried the uterine wall before it. An electrode was substituted for the sound, and a current of galvanism conveyed to the endometrium. This was done from day to day, without, at first, eliciting more than a slight flow of blood; but in time contractions followed, and finally sufficient firmness was established to justify the use of a vaginal support. At this juncture ergot and galvanism were used together, and a complete cure was eventually established. The patient had since become pregnant, and promised to do well. Dr. Perry thought this a case of subinvolution resulting from sudden and complete cessation of contraction after labor, leaving the uterus in a state of collapse; but he thought some might regard it as essentially a case of paralysis.

The Treatment of Orchitis.

Dr. H. M. Lawson recommends the following simple plan in the *Southern Med. Record*, March 20, 1884:

Take a piece of cheap, thin homespun, about three and a half inches long and three-fourths of an inch wide; double it the long way and sew the edges together; then fill with cotton, not too tightly, sew a button on one end and make a button-hole in the other; this, when buttoned, will

form a ring. All that is necessary in addition to this is a piece of the same kind of homespun four inches square. Apply as follows: Put the centre of the square piece of cloth to the centre of the swollen testicle below, bring the edges and corners up around, completely inclosing it, then button the ring around above the testicle, which will hold it in position. Now draw upon the edges and corners of the square piece all around until sufficient compression is made. The sound testicle is to be left above the ring.

If too much compression is made, it is easily removed by drawing the cloth in the opposite direction: it is easily increased or diminished at will. Its other advantage will be apparent on using it. Easily obtained, applied, and adjusted, I feel sure that no one who tries this method will afterward use any other.

Septic Pneumonia of Children.

In the *Deutsch. Arch. für Klin. Med.*, December, 1883, Silbermann publishes an article on this subject which thus concludes:

1. The septic pneumonia of infants and nursing children, and which begins as a tracheo-bronchitis, is a catarrhal, and very often a foreign-body pneumonia.

2. It begins by the aspiration of decomposing amniotic fluid and genital secretions, or by the inspiration of strongly-infected air from some septic disease of the mother.

3. Septic pneumonia of infants frequently accompanies diseases of the pleura, but seldom of other organs.

4. The alveoli and bronchi of the lungs of children dead of septic pneumonia are filled with bacteria.

5. The blood shows an increased amount of white globules, and a broken-down condition of the red.

6. Icterus is not a constant accompaniment of the disease.

7. The time at which the disease occurs is from one to two days after birth, and death usually takes place in about two days.

Hydrops Amnii and Change in Presentation.

Dr. N. O. D. Parks, of Ashton, R. I., writes to the *Med. Record* that he was called to attend a woman who had been in labor for over twelve hours. The pains were feeble, but after some hours improved. Examination showed a head presentation, os well dilated. The pains then ceased again, and the patient got up and walked

around. There was evidently a very large amount of liquor amnii, though the membranes were not ruptured. When the pains returned, examination showed that the foot was presenting instead of the head. Dr. Parks quickly ruptured the membranes and seized the foot, but found it hooked over the head. He finally disengaged it, and completed the delivery. "The points of interest in this case," continues Dr. Parks, "are the rapid and alarming change of presentation, and the difficulty in delivery arising from the foot becoming hooked around the child's neck. The fœtus had evidently been floating about in more than a gallon of liquor amnii, and constantly changing its position; and the lesson I would derive is in every case of hydrops amnii to rupture the membranes the moment you get a favorable presentation, without waiting for a pain, irrespective of the condition of the os."

Creasote Poisoning.

The *London Med. Record*, December 15, 1883, says that Dr. Pürckhauer (*Friedrich's Blätter für Gerichl. Med.*, 1882, p. 430) publishes an elaborate account of a fatal case of creasote poisoning, with the remark that only two cases of poisoning by creasote have previously been recorded—one by Müller (*Würtemb. Correspondenzblatt*, Band xxxix., No. 42, 1869), the other by the writer of this notice (*Guy's Hosp. Rep.*, 1875, p. 44), a non-fatal case. In Pürckhauer's case, a child ten days old received, as was computed, 24 to 30 drops of undiluted creasote. The symptoms were developed almost immediately, and were very like those produced by carbolic acid; injection and inflammation of all visible parts with which the poison came into contact, salivation, extremely contracted pupils, difficult respiration, imperceptible pulse, coldness of the extremities, profound coma, and loss of reflex activity. The child did not regain sensibility, was convulsed, and died sixteen hours after the administration of the poison. The necropsy showed lesions similar to those following the administration of carbolic acid—corrosion, local inflammation of the alimentary canal, dark blood, injection of the capillaries, and an all-pervading odor of creasote throughout the body.

Cold and Position in Strangulated Hernia.

With the view of demonstrating the advantages to be derived from a combination of these two resources, Dr. Geo. C. Kingsbury thus writes to the *Brit. Med. Jour.*, March 15, 1884:

I have recently had two cases of strangulated

hernia; both were severe, and had lasted many hours.

In the first, taxis, warm bath, opium, and chloroform had been tried without effect; the patient had begun to vomit. The foot of the bed was now raised high enough to rest on an ordinary chair, and an India rubber bag full of ice was placed over the tumor. After waiting an hour, taxis was again tried, and the tumor had scarcely been grasped when it began to yield, and the bowel was readily returned.

My second patient had the misfortune to be drunk, when he ruptured himself during a wrestling match. It was not until the next morning that he discovered his condition; and even then, not knowing exactly what was amiss, he waited to try if a dose of castor oil would cure him. In this case, simple taxis having failed, I at once adopted the same measures as before, and, in about three-quarters of an hour, was able to reduce the hernia with ease.

Sponge-Grafting of Sinuses.

Who has not had his patience severely tried by obstinate sinuses that would not heal, do what he might? For such, Dr. W. Winslow Hall casts a ray of light into the darkness, when he tells (*Edinburgh Med. Jour.*, March, 1884,) of an obstinate case which he has cured. There were several sinuses on the forearm, lined with a tough, dense membrane, which would not heal properly, notwithstanding that he injected stimulating lotions, laid them open and resorted to all the usual devices. Finally, he hit upon the idea of sponge-grafting, which he thus carried out. A strip of fine sponge, one and a half inches by a quarter inch, had been soaked in dilute nitro-muriatic acid for twenty-four hours, then washed in water, soaked in carbolic solution for twenty-four hours, and washed a second time in water. This was tied to a piece of thin catgut threaded on a long needle. A director was thrust to the bottom of the sinus; the point of the needle was passed down to the end of the director, and was then brought through the skin. The director was withdrawn, and by pulling on the needle and catgut the sponge-strip was made to fill the sinus from top to bottom. The catgut thread was cut off at the level of the skin, and the wound was dressed with carbolic oil.

Some months afterwards, the patient reappeared at the hospital to show his arm. There was a small pliable cicatrix, but otherwise the limb would have been taken for a normal one.

Post-partum Prolapse of Vagina.

Such a case as Dr. Blenkarne reports in the *Brit. Med. Jour.*, March 22, 1884, is by no means usual. After the birth of the child he found a semi-globular protrusion, about the size of the upper part of a six-months fetus's head, the surface shining, and of a dull reddish color, not looking at all unlike a foetal head covered by the amnion. On further examination he found that there was continuity of tissue between this protrusion and the external parts of the mother, that is, of the left buttock. The uterus was in its normal position and well contracted, and there was scarcely any hemorrhage. The urethra seemed pulled out of position, for, on attempting to pass a silver catheter, he could not pass it beyond three-quarters of an inch or so, and it appeared as if that passage were bent upon itself. The rectum was in its normal position. Upon attempting reduction of the tumor, he found that he was unable to do so to any great extent. He attempted taxis, and after some trouble (and without giving chloroform), the tumor, at least the greater part of it, was reduced.

Resection of the Lung: An Old Operation.

It would truly seem that there is really nothing new under the sun, for Dr. Bonfigli sends to the *Gazzetta degli Ospitali* a curious and interesting case that he has extracted from an old medical author, Nicholas Tulpius, of Amsterdam. A piece of lung about three fingers' breadth protruded through a large wound under the left nipple. The wound was altogether neglected for at least two days. The protruded portion of the organ then being found dead, was ligatured, and was cut off with scissors. It weighed about three ounces. The wound healed within a fortnight, with the viscus united to it, the latter point being verified six years later by section of the parts. Celsus and Hippocrates are quoted in support of the treatment adopted. Touching this case, it is of interest to remark that Dr. Biondi, from his experiments on animals, concludes that the removal of a lobe or the whole of a lung is, in a great number of animals, well borne. The operation in the human subject, however, performed three times lately with a view to cure (twice by Ruggi, of Bologna; once by Block), has as yet had only a fatal issue.

A Rare Form of Laryngeal Neurosis.

Although the condition to which Dr. P. McBride refers in the *Edin. Med. Jour.*, for March, 1884, is not particularly new, since it was described by Char-

cot in 1876, it is yet sufficiently rare to deserve notice. The condition can best be described by quoting one of Charcot's cases. A patient, who complained of gout and cough, but was certainly not epileptic, was from time to time, after a slight cough, affected by vertigo without loss of consciousness. During these attacks he fell down, without a trace of convulsive movement, but very soon recovered, and got up. These seizures were first noticed when the cough began. The attacks may vary in frequency and intensity, consciousness being sometimes absolutely lost. After discussing the mechanism of these attacks, Dr. McBride comforts us by stating that the prognosis is very favorable, since only one death has been recorded, and that the disease is very amenable to treatment, which we presume would consist in removing any local cause of irritation that might exist, or in allaying the excessive irritability of the laryngeal nerves by suitable means.

Topical Cardiac Blistering in the Treatment of Acute Rheumatism.

Dr. Neil O'Donnell Parks recently told the Rhode Island Medical Society (*Med. News*, April 5, 1884,) that he had employed this mode of treatment in seven cases, and in one of them no other measures whatever were used; the result being in this, as in the other cases, a prompt and complete cure. In the remaining cases, salicyn, or one of its allied compounds, and ammonium carbonate, were given internally. Oleum gaultheriæ was used in some instances—internally in doses of fifteen drops once in two hours, and applied locally to the inflamed joints, combined with an equal amount of lin. camphoræ comp. The series described included cases of acute articular rheumatism, and rheumatic gout, so-called. In some of the cases an endocardial murmur was present. Usually, one blistering sufficed, but in case of relapse it was repeated. The writer expressed his belief that we have, in the method under consideration, the most valuable adjunct to our means of successfully treating rheumatism.

The Treatment of Ruptured Perineum by Iodoform.

The *London Med. Times*, February 23, 1884, says that a recent number of the *Zeitschrift für Geburtshülfe und Gynäkologie* contains an article by Dr. C. Behm, on the above subject. He points out that in the region of the vagina and perineum the efficient application of the ordinary kinds of antiseptic dressing is very difficult, if not impracticable, on account of the unavoidable fouling of them

by urine and feces. Iodoform has the property of closely adhering to wound surfaces, over which it forms a felt-like covering, difficult of detachment. It is, therefore, peculiarly suited to the needs of the ano-vulvar region. The method which Dr. Behm recommends, is the painting the surface of the wound with "iodoform-collodium" (iodoform one part, flexible collodium ten parts). He believes that the protective film thus formed does not act as a foreign body, and prevent primary union, but that, on the contrary, by checking secretion, it favors this mode of healing.

The Reality of Gastralgia.

Speaking of neurosis of the viscera, Dr. Clifford Allbutt, in the *Brit. Med. Jour.*, March 22, 1884, argues strongly in favor of the reality of gastralgia, instead of considering it as an hysterical manifestation, and after citing many good reasons for his belief, concludes thus:

"And now, gentlemen, have I succeeded in enforcing that which you already know—namely, that all the symptoms I have discussed to-day form, not only a consistent, but a very uniform series? Few maladies present a more definite series, or one more capable of rational explanation. Is it not one of the last maladies to be classed with those of irregular, capricious, and fanciful evolution? Shall we then say, as the authors of our text-books do to this moment, that gastralgia is, for the most part, a malady of hysterical woman?

Calcium Sulphide in Diabetes Mellitus.

The variety of drugs that have been recommended for the cure of this very imperfectly understood disease, offers strong presumptive evidence of the inutility of them all. However, we must record what seems worthy on the subject. Dr. C. M. Cauldwell (*N. Y. Med. Jour.*, April 5, 1884), has used calcium sulphide in three cases; in one it produced no effect whatever, in the others improvement began and recovery took place during the administration of the remedy. The dose is $\frac{1}{4}$ to $\frac{1}{2}$ grain three to five times daily. Dr. C. concludes that although calcium sulphide is certainly not a specific in diabetes, yet it seems worthy of a trial in persistent cases of this distressing disease.

A Noteworthy Umbilical Hernia.

In the *Brit. Med. Jour.*, March 22, 1884, Dr. Trevor Fowler reports a case of operation for um-

bilical hernia which possesses the following points of interest:

1. The recovery of a patient, at the advanced age of sixty-eight, from so serious an operation.
2. The radical cure of the hernia, which appears to have been accomplished by inflammatory adhesions about the neck of the sac sealing up the ring, which then became consolidated by granulation and contraction of the wound.
3. The illustration which the case affords of the value of pushing opium, and of the absolute safety with which this may be done, provided it be only given, as here, in small doses at a time, at frequent intervals, and with strict injunctions to the nurse that the patient is never to be awakened for his dose.

An Anodyne Mixture Without Opium.

R. Chloroform,	.100
Ether. sulphur. spts.,	.025
Tinct. cannabis,	.175
Acid. hydrocyan. dil.,	.030
Hyosciamia,	q. s.
Ol. menth. piperit.,	.003
Tinct. capsici,	.003
Alcohol, 95 per cent.,	.350
Glycerine,	ad. 1.000
Dose, 10-30m.	

Dr. A. P. Meylert writes to the *Med. Record* that it has given him no little anxiety to find a suitable anodyne for patients cured of the opium habit. In attacks of intestinal colic or neuralgia, to which they are subject, any preparation containing morphia is necessarily excluded, since it would at once bring back the old habit. The above formula is the result of various experiments, and has been used with good results in his cases. Perhaps its publication may lead others to relate their experience likewise.

Gun-shot Wound in a Child of Eight Months.

Dr. E. B. Ward, of Greensboro, Ala., sends to the *Med. Record*, April 5, 1884, the history of a peculiar case of gun-shot injury. An infant of eight months was accidentally shot in the forearm, a charge of bird-shot lacerating the extensors, splintering the bones and elbow-joint. The infant recovered from the shock. Twenty-four hours after the injury, Dr. Ward amputated the arm just above the elbow. The operation had to be performed without intelligent assistance, but the patient made an excellent and rapid recovery.

—Dr. Sig. Friedmann reports the successful expulsion of tape-worm in ten cases, by the use of tannate of pelletterine.

CORRESPONDENCE.

Case of Renal Calculus.

EDS. MED. AND SURG. REPORTER:—

Mr. D. V. D., æt. 27, of bilious temperament, began to complain of dull aching pain in the lumbar region in June, 1883. Being hard worked mentally, and of a very sedentary habit, I attached little importance to his frequent, yea, almost constant complaints, till in October, when he was taken down with nephritic colic. This was relieved in the usual way with morphia hypodermically, etc. Contrary to the rule in a majority of these cases, the attack recurred again and again. Confirmed then in the opinion that I had an impacted, or, at least, a calculus in the kidney to deal with, I gave him all the usually prescribed remedies for the solution of the stone. But my hopes were blighted every time, till in January, 1884, I concluded to order lithiated hydrangea. (Lambert & Co.) I prescribed it in drachm doses four times a day. The patient, who, by the way, is a student of medicine and very intelligent, expressed himself in a few days as feeling better. He had only one attack of colic during the time he took the first bottle, and when he had used the second bottle he had a very light attack, in which he passed a skeleton-stone, *i. e.*, a mere shell. He is still using the medicine, but has had no return, and to all appearances is well. I have used the hydrangea in only one case of cystic disease outside that reported above, but with favorable results.

THOMAS M. JORDAN, M. D.

Hookertown, N. C.

Chronic Nasal Hemorrhage.

EDS. MED. AND SURGICAL REPORTER:

In the issue of April 5th of your valuable journal, I notice a correspondence by W. S. F., on a case of "Chronic Nasal Hemorrhage," in which the writer asks for advice.

It has been my fortune, or rather misfortune, to have seen a number of cases of chronic nose-bleed, and been called upon to treat them. The causes of this affection are so varied that I shall have to content myself with mentioning only a few of them which seem the most likely to be the origin of the bleeding in W. S. F.'s case.

Foreign bodies which children frequently push up into the nostrils cause ulceration of the mucous membrane when allowed to remain, and thus a small vessel is frequently opened, giving rise to hemorrhage more or less profuse. Nasal polypi, particularly of the fibrous variety, have a tendency to bleed spontaneously, and so have hypertrophies of the nasal mucous membrane. But a few weeks ago, I saw a case of chronic nose-bleed caused by a small aneurism situated in the mucous membrane covering the lower turbinated bone on the left side of the nose, which had been opened by ulceration. Another very frequent cause is a small ulceration at the lower portion of the cartilaginous septum, which is perhaps caused and kept up by the picking with the finger nail. Any one of these causes may be present in the case in question, but it is most likely that there is either a foreign body or polypus in the boy's nose, since the doctor states that the voice has a

nasal tone, indicating obstruction. It is not likely that there exists any hemorrhagic diathesis, since only one nostril bleeds, and no mention is made that the child bleeds excessively when the skin is broken in other parts of the body.

In regard to the treatment of these cases, the first step should be to cleanse the nostril from all clotted blood, and carefully examine the mucous membrane of the cavity for the bleeding spot, or for the cause, be it a foreign body, tumor, or hypertrophy. When found to be one of the latter, it should be removed by surgical means that will readily suggest themselves; but if it should be a simple ulceration on the septum, it should be touched with solid nitrate of silver, and the patient directed to keep his finger-nail away from it. There is no good in plugging the nostril with cotton soaked in astringent solutions, except when the hemorrhage is so copious as to be alarming, and then the plug should be taken out as soon as possible, and the cause removed.

There can be no evil effects following the cure of such cases, since the hemorrhage is not natural. On the other hand, the removal of the cause of the hemorrhage in the case of the boy, would rather tend to remove the anæmic condition and improve his general health, and particularly do away with the headaches which are due to pressure within the nasal cavities.

CARL SEILER, M. D.

Philadelphia, April 7.

NEWS AND MISCELLANY.

Kentucky State Sanitary Council.

(Concluded from page 477.)

"All crystallized sugars which have not been adulterated are comparatively harmless. Persons not taking much exercise, who take large quantities of sugar in the form of saccharose, will be able to dispose of no more than the amount of physical exercise and the demands of the vital forces require. To convert the saccharose into glucose is the natural course in the digestive process. Starchy foods, as is well known, must be converted into glucose in the normal process of digestion; but if they be so converted and then introduced into the digestive organs, indigestible ferments are produced and dyspeptic disturbances follow.

"Now, to return to the consideration of fruits. It must not be forgotten that all the ripe fruits, freshly taken, may be eaten in considerable quantities without detriment, and in most cases with advantage to the economy. Fresh ripe fruits assist the digestive organs in disposing of cured meats and of fatty matters; and whilst they contribute nothing of material value to the nutrition of the system, they are able to sustain life for a long time. When over-ripe, they cause fermentation in the alimentary canal, diarrhœa, and painful disturbances of the alimentary tract.

"Unripe fruits contain an indigestible and highly irritating substance, called 'pectose.' It has the marvelous power, when brought into contact with the gastric and pancreatic juices, of producing cells, identical in appearance and func-

tions with yeast-cells found in the liver and kidneys, and even excreted in the urine in diabetes mellitus. Eklund's observations, extending over a period of twenty years, published in the *Medical Herald*, August, 1883, tend to show that diabetes mellitus is the result of the growth of yeast-cells in the liver.

"What shall we say, then, of the dangers attending the use of cooked, unripe and over-ripe fruits? In a record of 9,012 cases of so-called naso-pharyngeal catarrh, 8,062 had well-marked lymphatic engorgement with enlarged tonsils, 8,654 confessed to the habit of eating cooked fruits, confections, and pastries daily. Out of 391 cases of tuberculosis, a persistent aversion to all kinds of animal foods existed in 254; of this latter number, not one recovered. Of 386 cases of persons emaciated and suffering chronic catarrh, change of diet and habits of life produced astonishing results—the longest period of time in any case of complete recovery being 8 months, the shortest 120 days. It is a little remarkable that the complete recoveries in the whole list were about equal in number to the consumptives who died. The most favorable subjects for treatment were those under thirty years of age. Animal diet in the form of fresh meats, milk, butter, and cheese, having been adopted to the exclusion of those articles believed to be noxious, allowing a liberal supply of vegetables and of ripe fruits uncooked, never failed to develop marked improvement independently of treatment. Tea should be prohibited, while the use of well-diluted alcoholic liquors, especially at dinner, is often necessary to stimulate the appetite for animal food, and to increase the capacity for digestion.

"Thus it would appear that domestic and personal hygiene should include the supervision of the diet, and that here lies the greatest field for the popular and general work of preventing disease.

THURSDAY.

Morning Session.

In the absence of Mr. Troutman, of Shepardsville, who was to have read a paper on "The Hygiene of Small Towns," Dr. Joseph McCormack, of Bowling Green, said:

"The dangers to which small towns are liable, arise in the main from the contamination of the soil and water by human excretions and kitchen slops, and the hygiene of towns without sanitary police inspection has reference mainly to the removal of these filthy products and a proper disposal of them. Systems of sewerage can not be advocated, because they can not be operated without a water system, and are too expensive. He recommended, therefore, the 'Pail System,' in successful operation in Lynn, Mass., and several smaller towns in Michigan and other parts of the United States. The system involves the idea of the construction of outhouses without vaults, the place of which is taken by large pails with a capacity sufficient to make their removal necessary once a week, and these to be removed by scavengers to convenient places for admixture into compost." This he stated had been done in many smaller towns at a cost of but \$2.60 per annum to each family, this including the expense of preparation for the operation of the system. The dis-

posal of kitchen-slops could be effected only partially by avoiding the practice of throwing them in one spot, and taking care to throw them in the winter where the garden will be made the following year, thus enriching the ground. The paper was freely discussed, especially with reference to what are called "the filth diseases," such as typhoid fever, yellow fever, and diphtheria.

Prof. J. W. Holland, of Louisville, read a paper on the subject of the contagiousness of consumption. He referred to an epidemic of acute consumption which occurred at a nunnery situated in Indiana, where one person having the disease and living in constant association with others, in the short space of nine months communicated the disease to nine other individuals, five of whom have died of the disease, two are rapidly sinking and will die soon, while the remaining two have the disease in a less virulent form and of a more chronic character. In these cases death will not result for perhaps several months, but these individuals will probably die of that disease in a comparatively short time.

The speaker then entered upon the consideration of the causation of the disease by the germ called "bacillus tuberculosis." There are a great variety of microscopic plants floating in the atmosphere we breathe, in the water we drink, in the food we eat, and which are constantly, therefore, being taken into the system, yet they do not all produce disease; on the contrary, many of them are salutary. In order to secure these bacteria of various kinds for microscopical inspection, it was discovered that by placing a boiled sliced potato exposed to the air there collected upon it a mold made up of these germs, which, having settled upon it, there found a suitable soil in which to grow and reproduce themselves. They present to the naked eye a variety of colors—red, green, and blue—when grouped together; and it was observed that one of these groups, being transferred to a fresh potato, always produced more and more, having the same color—red always produced red, and blue always blue. A peculiarity of one class of these germs was discovered to be a special affinity for the stain from aniline-coloring fluids. This class of germs, after having been transferred from one fertile medium to another, and allowed to grow through a series of fifty trials or more, was found to be the same.

These, after this series of trials, being injected into the blood of an animal, there found a suitable soil in which to grow, and multiplying themselves rapidly produced an infectious disease. The blood of this animal then being examined was found to contain these germs, and a drop of it being again placed upon sliced potatoes began again to produce germs identical with those produced before the series was broken, and thus they always remained the same. It was now discovered that one class only of these germs was capable of receiving a stain in a peculiar way. This class, after a series of reproductions, being injected into the blood of an animal, caused a disease identical in its manifestations and terminations with consumption. Then it was discovered that the sputa of consumptive persons always contains this particular bacillus, and that these can in like manner be cultivated upon gelatine indefinitely and always retaining the same characteristics, and,

after this cultivation, being injected into the blood of an animal produced consumption. This class was therefore named the bacillus tuberculosis. It is argued that if this bacillus is able to produce consumption in the lower animals, and if it is always found present in the sputa of consumptives and the tubercle itself, it is therefore the cause, and not a product of the disease. It is held that it produces its fearful work in the system by its power of rapid reproduction, one of these germs being capable of reproducing and multiplying to the amount of 40,000, or even 1,000,000, in a single day; that being foreign bodies, indeed bearing the same relation to the tissues of the organs in which they grow and reproduce themselves that the trichina spiralis of diseased pork does when it gains entrance into the system, they, by their rapid reproduction, insinuate themselves into the tissues of the lungs and other organs to such a degree and in such quantities as to produce constant irritation and inflammation.

Another factor necessary is the susceptibility of the person, which bears the same relation to this germ that fitness and fertility of soil bears to seed. That susceptibility is always great in proportion as the system is debilitated, whether that debility be a part of individual peculiarity which we at present recognize as hereditary, or whether it be acquired through exposures that lessen vitality, overwork, insufficient clothing, food, pure air, sunlight, or any other of the depressing causes that produce it by lowering the vitality of the system.

A few words may not prove uninteresting as to the peculiarity with which these germs called bacillus tuberculosis receive and retain aniline coloring dyes. As a matter of fact all these germs, whether harmless or virulent, will receive these stains; but so far as investigations have been pursued it is known that this germ both receives and gives up its stain much more slowly than the others with which it may be associated. Then when all together have remained in a coloring fluid sufficiently long to be stained, the quick action of an acid upon them decolorizes all but this particular class, which, as has been already said, receives and gives up its stain slowly. Then a short immersion in another colored fluid suffices to re-stain those just decolorized, without affecting the bacillus tuberculosis, which now under the microscope appears separate and distinct.

The practical bearing of this subject upon sanitation is this: If consumption be due to the combination of two factors, neither of which alone can operate to produce the disease, it would seem a rational conclusion that by preventing, if possible, these two causes from combining, the disease can be prevented. Might not then many cases of consumption be prevented by preventing persons who have inherited or acquired this condition of debility from association with persons known to have consumption, and in whose presence these bacilli are most likely to be rife?

In the afternoon, Prof. H. J. Greenwell, of Bardstown, read a paper on the subject of the importance of hygienic instructions by physicians in attendance upon the sick.

Prof. Wm. J. McConathy, of Louisville, then read a paper on "Hygiene in the Public Schools." This had reference particularly to the subject of

ventilation and heating of the buildings, but perhaps more particularly to some of the faults in the methods of teaching. As the reporter understands it, he thinks there are better and more nearly natural methods of teaching than by confinement of the attention of the child to so many text-books. The rules to some extent governing its physical welfare, he thinks, can be sufficiently impressed to guide the child often in its conduct, and conduce to its health and well-being.

Prof. J. A. Tanner, of Louisville, discussed and illustrated the subject of adulterations of food.

In the discussion of the proposed sanitary legislation in Kentucky, all seemed deeply interested, and many participated, Judge Wyckliffe expressing it as his opinion that the bill regulating the practice of pharmacy should be increased and made applicable to every portion of the State, without reference to the number of inhabitants of any particular section. He spoke at some length on the importance of the adoption of the bill regulating the practice of medicine.

At the close of the discussion, the convention, constituted of the citizens of Bardstown, Nelson county, and visitors, unanimously resolved that the bill to increase the efficiency of the State Board of Health, the bill to give effect and practical enforcement to the law intended to protect citizens of Kentucky against the dangers of empiricism and quackery in the practice of medicine, and an amendment to what is known as the State Pharmacy Laws, so as to make these apply to the protection of the whole people in every part of the State, should be enacted by the present Legislature; and it was resolved also that the foregoing should be presented to the Committee on Sanitary Regulations by the Permanent Secretary of the State Sanitary Council, Dr. J. N. McCormack.

Evening Session.

Dr. Dudley S. Reynolds, Chairman of the Nominating Committee, reported as follows: For President, Mr. George Baber, of Louisville; First Vice President, Dr. A. Crawford, of Bardstown; Second Vice-President, Prof. William J. McConathy, of Louisville; Third Vice-President, Prof. L. Eddy, of Danville; Fourth Vice-President, Dr. A. D. Rodman, of New Haven.

The report of the committee was, on motion, unanimously adopted.

Mr. George Baber, editor of the *Sunday Argus*, of Louisville, then read the following paper on "The Relations of the Press to Sanitary Reform:"

"The press is at once an obedient servant and a masterly power. It serves everywhere the common weal, and is the greatest foe of public wrong. Its influence embraces the scope of civilization. Its relations are as numerous as human wants. Wherever felt, it awakens thought and arouses action. It fosters progress and aids reform. It develops opinion, inspires effort, and directs each movement of the state. It is a patron of science, a champion of law, and the vital factor in every benevolent work. It seems befitting, therefore, on an occasion like this, that some words should be kindly uttered for the press. The work which engages this Sanitary Council involves the appliances of science, the authority of law, and the aims of popular beneficence. It is the problem of the State's supervision of the public health. This

problem, in its practical form, though comparatively new in Kentucky, has been surely coming to the front. It is superior, in fact, to every issue in politics, and above all cunning of the statesman's craft. It concerns every citizen's hearthstone and home. In 1868 the first step was made to organize sanitary work in the State, but its progress has been rapid and great. It is hailed already as a crowning merit. It has awakened the zeal of the medical profession. It has won the sympathy of the people. It has secured substantial though inadequate assistance from legislation. It has produced this enlightened body, and enlisted the support of the press. The latest experiments in the solution of this problem have magnified the value of sanitation, and justified the prophecy of the learned Henry Bowditch, who said, 'This business of governmental attention to public health is to be one of the great labors of the coming centuries in all civilized countries.' To this great labor the press must always bear an essential relationship. It can vitalize or it may destroy; it can build up, or tear down the cause. Its relation to the work in Kentucky should be that of encouragement to every faithful participant. It should uphold the State Board of Health, and co-operate with this Sanitary Council. The cultivation of a healthy public sentiment on this subject is as necessary as the use of disinfectants to purify the atmosphere. The best undertakings are often assailed by the malaria of prejudice—a poison that has frequently proved fatal to plans that would otherwise have become vigorous, thrifty, and blessing-full to mankind. Kentucky has too much of this poisonous air. It dwarfs personal endeavor. It deters public enterprise. It hurts the whole State. It keeps Kentucky lagging in the march of progress. In this condition of affairs, the press finds a great duty to perform, and its health-giving influence should be bravely applied to the task. The prejudice which ignorance has arrayed against sanitary reform must be driven away by its power. The work now done in the organization of sanitary boards in Kentucky is mainly the result of personal effort. In one hundred and nine of one hundred and seventeen counties, local boards have been formed under the auspices of the State Board of Health; but the aid from the State itself has been small. In some of these boards the element of usefulness, in others, the spirit of indifference prevails. In the best, as in all of them, there is need of encouragement and light. The advancement of the past decade has still left ample room for the development of popular sentiment and for awakening public thought on the subject. This task remains to the press. It constitutes, in fact, its principal relationship to sanitary work in Kentucky. In regard to this, as to every public work, the duty of criticism is important. The newspaper cannot ignore it. Criticism, however, should be thoughtful and timely, lest it be simply hurtful; nor should it exclude that noble sense of justice which appreciates honest effort, whether successful or not. The faithful physician who devotes to this reform both time and labor, cannot be infallible, and deserves generous treatment from the press. He is entitled to its aid. His faults need not be magnified, but his merits should be given that hearty recognition which dignifies the giver and fills the recipient

with strengthened joy. It may be said just here, that no vocation among men does so much unpaid toil of hand and of brain as the medical profession. Its good deeds are done wherever human suffering is seen. The ravages of flood and of storm, the relentless epidemic, the casualties of river and of rail, the wounds of battlefields, the sick of the hospital and the hut, alike command the service which is oftentimes given for neither charge nor pay. It is the good Samaritan among vocations. It is the poorest paid of the race. In fact, it is that profession 'whence comes the skill and wisdom to apply to the myriad uses of man the laws of nature; which tames the fiery spirit of the air, and transforms into faithful and unwearying servants the blind, unreasoning forces of the earth.'

"The press is the natural ally of such a profession. It is its brother in humanity's cause. It is the link that binds it to the welfare of the State. The press, therefore, must be employed to remove the obstructions to sanitary reform, honoring at once the workers and the work. Legislators and Governors feel its influence and are moved by its power.

"Thomas Carlyle, the famous author, perceived this fact when he quaintly said, 'Great governors, clad in purple and insignia, are governed by their valets, by the poutings of their women and children, or, in constitutional countries, by the paragraphs of their able editors.' And, in portraying the effect of organized popular thought when directed by the press in favor of great reforms, the same immortal writer said: 'Ever louder rises the plaint of such a multitude into a universal, continual peal of what they call public opinion. What king or convention can withstand it?' Public opinion is the formulated power of the press, and its potent influence is needed for the cause of sanitary reform in Kentucky. Historical evidences show that sanitary science and the printer's art are alike hoary with age. One thousand years have elapsed since the art of printing, antedating the crude contrivances of the German, Gutenberg, was discovered in Japan, where, in the eighth century, it was originated by a woman, the Empress Ghyantoka, and hid for centuries among the mysteries of the ancient kingdom. But sanitary science is older than the press. It is older even than Æsculapius, the founder of the healing art, whose gifted sons were the physicians of Homer. Though it be true that proper methods of ventilation are comparatively new in America, yet we are told that experiments at the pyramids in Egypt show that 'those Egyptian tombs were ventilated in the most perfect and scientific manner.' Near three centuries ago, sanitary appliances were well defined and conspicuously useful in Britain. To the sanitary police controlled by the Royal Society of England's capital, in restricting the plague of 1665, and in suppressing the conflagration that enveloped London in 1666, Macaulay has ascribed 'the changes which, though far short of what the public welfare required, yet made wide differences between the new and the old London, and probably put a final close to the ravages of the pestilence.'

"The importance of sanitary law has had an uncertain growth since the conception of medical science first dawned on the genius of Hippocrates

and Galen. Its pathway has been up and down, through the vicissitudes of a hard struggle for recognition. It has verified a memorable axiom of Rudolph von Irling, who pertinently said: 'All in the world has been obtained by strife; every principle of law which obtains had first to be wrung by force from those that denied it.' It would seem that Kentucky should be foremost in this struggle for sanitary reform. The State is rich in the annals of the medical profession. It has ever been a prominent seat of medical lore. Within its limits, at Lexington, was established the first medical school west of the Alleghanies. The State has given to the profession many bright names: McDowell and Dudley, Brashear and Briggs, Yandell and Gross, Mill and Bell, have illumined Kentucky's medical fame, and their example should inspire with zeal the courageous men who are giving now both time and labor to sanitary work. The work is vital to the State. Difficulties are in its way, but they are not insurmountable. They will yield before the progressive spirit that fills and impels the present generation of Kentucky. The croakers must stand aside. They should not have one inch room. The atmosphere of the State is uncongenial to the impractical vagaries of Herbert Spencer on the subject. Kentucky must be true to the fame of her great sons, and up with the strides of her sister States. A general Board of Health and a system of sanitary reform must be maintained liberally by the state. Perfection in the work cannot be reached at once. It is necessarily a gradual growth, and the mission of this Council is wisely and patiently looking to the end. The future conquests of medicine, despite the antiquity of science, are destined to exceed the achievements of the past. The profession looks forward to an ever-brightening future. Its discoveries can be limited only by the domain of human thought, and the day will come when fulfilling the prophecy of Sir James T. Simpson, the followers of Æsculapius 'shall be familiar with the chemistry of most diseases; when they shall look upon the cure of some maladies as simply a series of chemical problems and formulas; when medical men shall be able to stay the ravages of tubercle, blow out fevers and inflammations, avert and melt down morbid growths, cure cancers, destroy all morbid growths and ferments, annul the deadly influence of malaria, and by these and various other means, lengthen out the average duration of human life.'

"Kentucky presents a varied field for sanitary reform. The water-courses that bind the State's extensive borders; the recurrent floods that overflow our towns, devastate fields and imperil human life; the increasing number of our prisons and their inmates; the care of our asylums for the deaf, the blind, the feeble-minded, and the insane; the growing needs of our cities in reference to systems of sewerage and drains; the expanding populations that occupy districts which actually harbor contagion and malaria—each and all of these, in their relation to medical science, afford to the Kentucky student of sanitation exhaustless opportunities for investigation, study, and for work. The progressive press of the State is awaking more and more to these great facts. It perceives the broad field they offer to the devotees

of sanitary science. It hails with pride the deliberators of this Council. It is ready to assail with destructive force the obstacles that oppose it, and to you may be safely pledged to-day its generous aid in putting Kentucky foremost in the cause of sanitary reform."

An erudite and well-digested presentation of the importance of introducing the study of the rudimentary principles of sanitary science into all the public schools was made by Dr. J. N. McCormack, of Bowling Green.

Rev. Father O'Connell concluded the exercises in a humorous and entertaining criticism of the principal essayists who had contributed to the work of the Council.

On motion, the Council then adjourned, to meet on the first Tuesday of October next at Danville, Ky.

The American Medical Association.

The Chairman of the Section of Practice of Medicine submits the official programme for the meetings of the Section of Practice of Medicine, to be held in Washington, D. C., Tuesday, Wednesday, and Thursday afternoons, May 6, 7, and 8, 1884.

The following special subjects have been promised, and those who are announced to enter into the discussions have accepted, and will be present:

1. Discussion on "A Contribution to the Clinical Study of Epilepsy," will be opened by Professor William Pepper, of Pennsylvania. Dr. Roberts Bartholow, Pa.; Dr. Horatio Wood, Pa.; Dr. J. S. Jewell, Ill.; Dr. James T. Whittaker, Ohio; Dr. O. P. Hooper, Ark.; Dr. Eugene Grissom, N. C.; Dr. James E. Reeves, W. Va.; Dr. T. B. Lester, Kansas; Dr. Joseph P. Logan, Ga.; Dr. W. K. Bowling, Tenn.; Dr. John S. Moore, Mo.; Dr. James F. Hibbard, Ind.; Dr. J. J. Caldwell, Md.; Dr. John A. Murphy, Ohio; and Dr. A. P. Grinnell, Vt., are expected to take part.

2. A discussion on the "Clinical Study of the Heart Sounds," will be opened by Professor Austin Flint, Sr., of New York. Dr. Edward Janeway, N. Y.; Dr. William Pepper, Pa.; Dr. Frederick C. Shattuck, Mass.; Dr. John H. Bemiss, La.; Dr. James Wilson, Pa.; Dr. Richard McSherry, Md.; Dr. James R. Leaming, N. Y.; Dr. John S. Lynch, Md.; and Dr. A. B. Palmer, Mich., are expected to take part.

3. A discussion on "Tuberculosis" will be opened by Dr. Henry F. Formad, of Pennsylvania. Dr. Austin Flint, Sr., N. Y.; Dr. William Welch, N. Y.; Dr. N. S. Davis, Ill.; Dr. George M. Sternberg, U. S. A.; Dr. S. Fitz, Mass.; Dr. Henry O. Marcy, Mass.; Dr. James Tyson, Pa.; Dr. Edward Janeway, N. Y.; Dr. Charles Dennison, Col.; Dr. Henry F. Campbell, Ga.; Dr. W. T. Belfield, Ill.; Dr. Alonzo Garcelon, Me.; Dr. E. O. Shakespeare, Pa.; Dr. G. C. Smythe, Ind.; Dr. Harold C. Ernst, Mass.; Dr. W. E. Geddings, S. C.; Dr. Traill Green, Pa.; and Dr. John Lynch, Md., will take part.

The following papers are also promised:

Ayres, S. G., M. D., Theory and Instrument of Diagnosis.

Bartholow, Roberts, M. D., subject to be announced later.

Crawford, S. K., M. D., Etiology of Enteric Fever.

Duhring, Louis A., M. D., Dermatitis Herpetiformis.

Flint, Austin, Jr., M. D., Dietetic Treatment of Diabetes Mellitus.

Green, Traill, M. D., The New Official Chlorate.

Griswold, Gaspar, M. D., Irregular Apoplectic Attacks from Other Causes than Hemorrhage and Embolism.

Janeway, Edward, M. D., Simulation of Pathognomonic Signs and Symptoms.

Jackson, S. K., M. D., Typhoid Fever.

Keyt, A. T., M. D., Retardation of the Pulse in Mitral Insufficiency.

Linn, G. A., M. D., Specific Treatment of Diphtheria and Croup.

Marcy, Alexander, Jr., M. D., Muscular Hypertrophy of the Stomach.

Marcy, Henry O., M. D., The Germ Theory of Disease.

Miller, J. P., M. D., Phthisis, its Successful Treatment.

Prentiss, D. W., M. D., 1. Importance of Uniformity in the Pharmacopœia. 2. A Plea for Greater Interest in the Pharmacopœia on the Part of Physicians.

Reed, R. Harvey, M. D., Irritation of the Capsule of Glisson.

Schenck, W. L., M. D., Occult Causes of Disease.

Tyson, James, M. D., The Milk Treatment of Disease.

Welch, Wm. H., M. D., Pathology of Myocarditis.

Whittaker, James T., M. D., The Etiology of Pericarditis.

Wilson, James, M. D., The Diagnosis of Tumors of the Anterior Mediastinum.

Chemistry in China.

The Chinese have begun to adopt the Western chemical science, and a factory has recently been erected for the manufacture of sulphuric acid on a large scale. Two well-known chemical textbooks, Malgutti's "Elementary Chemistry," and Fresenius' "Chemical Analysis," have also been translated into Chinese with the help of a great number of new characters, and adopted into the Imperial colleges. His Excellency Tong Sung, First Minister, and a director of the Tung Wen Huan, has taken the work under his immediate patronage, and written a preface for the first of these books.

Burn Brae Private Asylum.

It gives us pleasure to testify to the admirable arrangements of this institution, its healthful location, and the excellent results it obtains. Few alienists in this country equal Dr. Given in long practical experience, and none surpass him in skill and kindness toward those committed to his charge. The location of the institution in the immediate vicinity of Philadelphia offers every convenience of access. We would recommend our readers who may be in search of a medical home for patients mentally affected, to address Dr. R. A. Given, Clifton Heights, Pennsylvania.

New York Neurological Society.

At the annual meeting of the New York Neurological Society, held April 1, 1884, the following officers were elected for the ensuing year: President, William J. Morton, M. D.; First Vice President, C. L. Dana, M. D.; Second Vice President, George W. Jacoby, M. D.; Recording Secretary, E. C. Wendt, M. D.; Corresponding Secretary, W. M. Leszynsky, M. D.; Treasurer, E. C. Harwood, M. D.; Councillors, E. C. Seguin, M. D., L. Weber, M. D., T. A. McBride, M. D., W. R. Bird-sall, M. D., Graeme M. Hammond, M. D.

Items.

—Where no special cause appears for frequent micturition, this trouble is best treated by passing a weak galvanic current from the lumbar region to the region of the bladder.

—Dr. Stogwart, of Brussels, has employed chrysophanic acid internally in sixty-one cases, comprising eczema, psoriasis, lichen, etc., and reports that fifty-six were complete cures.

—Dr. M. Pargamin reports the reduction of a scrotal hernia by fifteen minutes' faradization and manipulation, when three hours of taxis had signally failed. The tumor was faradized in all directions.

—The Russian government has conferred the grand cordon of the order of St. Stanislaus upon Prof. Frerichs, for the services rendered to Russian students by him in the universities of Breslau and Berlin.

—In the *Pacific Medical and Surgical Journal*, March, 1884, Dr. Julius Rosenstern reports a case of simultaneous ligature of the subclavian and common carotid arteries for aneurism of the innominata—recovery.

—The latest trick in professional advertising in New York city is to write, or have written, a biographical sketch of one's self for some obscure family paper, pay for an extra edition, and have specimen copies of the same distributed upon the thoroughfares.

—The *London Medical Times* calls attention to the excessive mortality from whooping-cough in that city for a number of weeks past, and advocates the establishment of half a dozen small hospitals for children affected with the disease, where they can "be rigidly kept in a temperature like that of a southern health resort."

—Three students of the Harvard Medical School, who recently passed their examinations, are not happy. One wrote an excellent set of papers, the other two copied them word for word, and the examiner ranked them at 98 per cent. He remarked, however, that as the three papers were identical this gave the three but about 33 per cent. each, and as 50 per cent. is required for a diploma, all three were plucked.

OBITUARY NOTICE.

ARTHUR M. WILSON, M. D., PH. D.

Dr. Arthur M. Wilson, son of Dr. Benjamin B. Wilson, died at his father's residence, 1903 Chest-

nut street, in this city, March 31st, in the 22d year of his age. Dr. Wilson was graduated from the University of Pennsylvania in 1882, taking the degree of Doctor of Philosophy in June of the same year. He immediately entered upon the active duties of his profession, establishing himself in the home in which he grew up to manhood. So favorably was he known and regarded, that his business became at the outset extensive as well as lucrative, placing him at once in a position that most young physicians are obliged to spend years to attain. But his health, never robust, and doubtless impaired by too continued and persistent study during the period of his pupilage, was now unequal to the demands upon it. The inevitable exposure and fatigues of a physician's life developed with him a constantly-recurring tendency to lung congestions, and he found himself unwillingly compelled to abandon his bright professional prospects, and seek a recovery in rest and the care of his family. For a time the efforts of devoted relatives gave hopes of at least a partial restoration; but the past winter has been especially a trying one to invalids, and he passed away peacefully and happily in the earliest bright days of spring.

Dr. Wilson's temperament was amiable and kind, yet dignified and self-asserting. He was enthusiastic in his profession, and of perception and judgment remarkable in one so young.

MARRIAGES.

DAVIS—BEDELL.—At Fortsville, March 13, 1884, by the Rev. E. N. Howe, Marco L. Davis, of Troy, N. Y., and Jennie E. Bedell, daughter of Rev. C. C. Bedell, M. D.

DUNHAM—DOWS.—At the residence of the bride's parents, Wednesday, April 2, 1884, by the Rev. William S. Rainsford, Carroll Dunham, M. D., and Margaret Worcester, daughter of David Dows, all of New York.

MAYGINNES—HALL.—At Mound Valley, Kansas, March 19, 1884, by the Rev. Hugh M'Birney, Niceus W. Mayginnnes, M. D., and Flora A. Hall, daughter of the late Rev. Wm. Hall, of the New York Conference.

ROGERS—SLEDGE.—In Como, Miss., March 20, 1884, Dr. S. A. Rogers, of Memphis, and Miss Pattie Sledge, of Como.

WOLFE—HASKELL.—In New Albany, Ind., March 27, 1884, Dr. H. S. Wolfe, of Corydon, and Miss Nealie Haskell, of New Albany.

DEATHS.

ARCHER.—In Pointe Coupee, La., March 17, 1884, of congestion of the brain, Dr. John G. Archer, aged sixty-four years.

CHIPLEY.—In St. Louis, March 16, 1884, Dr. William B. Chipley, in the eighty-fourth year of his age.

CORYELL.—In this city, April 4, 1884, Dr. R. H. Coryell, aged sixty-six years.

KENNEDY.—In New York city, Saturday, March 29, 1884, James Kennedy, M. D., aged eighty-four years.

NEALL.—In this city, March 29, 1884, after a lingering illness, Dr. Samuel W. Neall, aged seventy-six years.

RISING.—At Sufield, N. Y., March 27, 1884, Aretas Rising, M. D., aged eighty-two years, three months, and twelve days.

SMITH.—In Greenville, Ind., March 24, 1884, of paralysis, Dr. Reuben C. Smith, a resident of Floyd county over sixty years, aged eighty-one years.

WILSON.—In this city, March 31, 1884, Dr. Arthur M. Wilson, youngest son of Dr. Benjamin B. and Mara L. Wilson, aged twenty-one years.

WHITE.—In Macon, Ga., Sunday, March 30, 1884, Dr. J. A. White, of Brooklyn.

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[VOL. L.—No. 17.]

ORIGINAL DEPARTMENT.

LECTURE.

1. A CASE OF SCORBUTUS. 2. A CASE OF SUPPOSED GRAVES' DISEASE.

A CLINICAL LECTURE DELIVERED AT THE PHILADELPHIA
HOSPITAL.

BY EDWARD T. BRUEN, M. D.,

Demonstrator of Clinical Medicine University of Pennsylvania and one of the Physicians to the Philadelphia Hospital.

GENTLEMEN: The patient before us is a Hungarian, and has a very imperfect understanding of the English language, so that we have been unable to acquaint ourselves very thoroughly with his history. So far as can be made out, it appears that he has been working on the railroad at Phoenixville, and for from ten days to three weeks before admission to the hospital had been suffering from some form of disease attended with fever and extreme debility. He was admitted on the 19th of the month, one week ago. That evening the temperature was 103°, the pulse, 100. On the morning of the 20th, temperature, 102°; pulse, 104. Evening, temperature, 103.8°; pulse, 104. On the morning of the 21st, temperature, 102°; evening, 103°. On the 22d the temperature suddenly fell to 98°. The other symptoms which were noted on admission, were an exceedingly feeble action of the heart, the first sound being so feebly developed that it seemed as though the slightest movement would occasion syncope; there was also marked congestion of the lung as indicated by bronchial breathing and impaired resonance on percussion. The physical signs taken in connection with the history, the high tempera-

ture, and feeble pulse, led the resident physician to suspect when he first saw the man that he might be suffering from pneumonia. The examination made the following day disproved this idea: in the first place, because the physical signs were bilateral, and as you can readily understand, extensive bilateral pneumonia is inconsistent with life; and in the second place, because the above physical signs had to a great extent disappeared, showing that the consolidation was more apparent than real, and due simply to congestion of the lung.

The appearance of the case suggested that the man might be suffering from typhoid fever. The temperature on admission certainly favored that view, there being a continued fever, with a slight remission between the morning and evening temperature. The history was quite negative, but there were certain considerations about the case which seemed to shake the plausibility of the diagnosis of typhoid fever. The most conspicuous of these considerations was the extreme weakness of the heart, and yet the phenomena of the typhoid state, which are usually associated with such profound cardiac weakness in typhoid fever, were not present, for, you know, that when the extremely weak pulse appears in typhoid fever, it is, as a rule, associated with a peculiar nervous exhaustion. Again, the appearance of the patient's tongue did not favor the idea of typhoid fever, for it was neither brown nor dry. There was, also, an entire absence of abdominal symptoms. By abdominal symptoms, I do not mean diarrhoea alone, or tenderness alone, for, as you perhaps know, typhoid fever often runs its entire course without either diarrhoea or abdominal ten-

derness, and there may even be constipation. In typhoid fever, however, there will usually be found a certain amount of tympanitic distension of the abdomen. This is a very constant symptom. This patient's abdomen is concave. Moreover, there is absence of eruption and no enlargement of the spleen. These points must be associated with the fact that the patient had evidently been ill for at least two weeks, so that he would have passed into the stage when these common and ordinary symptoms of typhoid fever appear.

The next most plausible idea that occurred to us was that the man was suffering from some form of malarial fever. While in the hospital, he had fever without intermissions and even without marked remissions, and the idea of malarial fever was therefore rather negatived at the outset, and yet it is important to analyze the *tout ensemble* of the case. In doing so, we must recall the fact that his sickness has lasted two or three weeks, and has apparently constantly presented the same aspect as it did a few days ago. The occurrence of remittent fever indicates a high degree of malarial poisoning, and this marked malarial impression is characterized by congestions of the internal organs, as the spleen, liver, and digestive circulation. We find no enlargement of the spleen, no evidence of congestion of the liver as shown by constipation, enlargement of the organ, or symptoms of intestinal indigestion. Taking these things in connection with the fact that the temperature was not intermittent and not even remittent, and the fact that there was no history of chills, we laid aside the idea of malarial poisoning, but kept it in abeyance to a certain extent, because malarial poisoning is an exceedingly insidious complaint, and very irregular. I do not think that in any clinical diagnosis we should ever settle down upon a conviction unless all the evidence fits together as do the separate figures of a puzzle. I am sure that the longer you study diseases the more satisfactory your work will be if you so endeavor to combine them.

Is there any other disease from which this patient could suffer which would be more in accord with the history and the symptoms? There is one disease, not a very common one, and yet perhaps its minor manifestations are less often recognized because less often looked for. I allude to a dyscrasia of the blood tissue brought about by imperfect nutrition and improper hygienic surroundings. You recollect that this patient has been working in the cold and damp weather of the past few months, and as a foreigner, unable to

speaking the English language, he has probably been more exposed to hardships than a person familiar with the language would have been, and I fancy that his diet has been limited and insufficient. With these preliminary suggestions, let me ask, what was the most prominent symptom which this patient presented on admission? At the outset of my remarks, I mentioned that the first symptom which attracted our attention was great feebleness of the heart. This was so conspicuous as to lead us at each visit to the patient to increase the amount of stimulus until he received ten ounces of whisky and two ounces of alcohol per day. I only mention this to show you how convinced we were of the importance of this symptom. Although he received such a large amount of stimulants, the weakness of the heart continued, and it persisted despite the additional use of digitalis. When his mouth was examined, it was found that the gums were spongy, swollen, and bluish in appearance. A part of the bluish discoloration was, however, due to the accumulation of tartar on the gums. The face presented a dusky hue, somewhat analogous to sun-burn, which covers up a yellowish discoloration. In spite of the redness which was due to local congestion, there was anæmia of the mucous membranes, and a dull and sodden appearance about the face. On examining the body, there were found a few stripes running across the abdomen, which resembled the stripes left by a whip. These are technically called vibices. There was also a dusky line around the waist, indicating the point at which pressure had been made by the strap which held the pantaloons in position. Other than these, there were no ecchymoses, spots, or other eruptions on the surface of the body.

With these facts at hand, I think that we have a more plausible explanation of the symptoms in the dyscrasia of the blood than in the theory of either typhoid or malarial fever. Scorbutus or scurvy is very rare as a well-marked affection. Last year, however, I had the opportunity of studying a well-marked case of scurvy in the University Hospital. This had developed in the Italian quarter of the city, in an Italian who had been without sufficient food, or at least without a sufficient variety.

The three marked symptoms of scorbutus are, spongy gums, infiltration of the muscles, especially those of the calf and of the tissues around the joints of the lower extremities, with petechial eruptions and extreme weakness, especially of the heart. These are the most characteristic, although there are many other symptoms connected

with the anæmic condition of the blood ; for in scorbutus the lesion is supposed to be in the blood-tissue. This lesion is presumably a deficiency of the positive alkaline salts, and a preponderance of the neutral salts—consequently, the blood becomes more highly acid than it should be ; the alkalinity of the blood being lessened, leads to an imperfect elaboration of the red blood corpuscular elements, and a condition of anæmia ensues. This anæmia, I say, results from the imperfect elaboration of the red corpuscular elements, and is due to the action of the acids in the blood on the corpuscles ; yet in certain advanced and severe cases of scorbutus, in addition to imperfect formation there is a destructive action exerted by the acid condition of the blood upon those corpuscles which may be formed in the blood-vessels. This condition is a progressive one. It has its period of invasion and its period of full development. It never appears in a moment, and therefore it is easy to understand that if you examine a patient in the early stages of imperfect elaboration of the blood, the disease may be diagnosed without all this array of symptoms. Of the characteristic symptoms previously mentioned, there are but two found in this patient, the spongy gums and the extreme cardiac weakness. These two symptoms are perhaps more constantly present in scurvy than any others. The reddish hue of the face is not inconsistent with the idea which I have mentioned, for in the early stages of scorbutus the red corpuscular elements are not especially affected.

I have already alluded to the condition of the muscles of the lower extremities. The muscular tissues generally are infiltrated with an albuminoid material, which exudes from the blood-vessels and fills up the interstices of the muscles, so that when a section is made they cut like a specimen which has been imbedded in wax. There is a law, gentlemen and ladies, which governs the processes of disease, which, I think, is well illustrated in this case. The law is that lesions appear in the points of the body which are most exposed to overstrain. There is a close analogy running through the processes of disease which can be applied in this way. In rickets the lesions in the bones develop in those bones which are most used, that is, in the bones of the forearm, for the child crawls before it walks. The lesions also appear in the ribs, because these are in constant action. So in heart affections, the changes in the muscle correspond with the amount of strain upon the muscle. The same is true in scurvy. The lesions of the gums occur chiefly because the teeth

are used in chewing. Where the teeth have been lost, the lesions of the gums are very apt to be absent. This has been a well-sustained and constant observation. The muscles of the limbs, being more constantly used than the other muscles, are the favorite seat of the lesions. The eruptions on the body are apt to be connected with irritation of the clothing, and here we have noticed the brown discoloration across the abdomen where the brace of the pantaloons has pressed.

With these facts, I think that if we can only account for the high temperature, the diagnosis will be pretty well established. I would call attention to the fact that, as a rule, scorbutus is not a febrile disease. For instance, it is improper to speak of scorbutic fever, but it is proper to speak of the fever of scorbutus. What is the fever apt to be due to? In nearly all cases, to some complication. Sometimes this is found in the condition of the muscles of the legs, for this exudation of plasma into the muscles is frequently attended with some inflammatory disturbance in the joints or elsewhere. In the present instance the high temperature was probably connected with the pulmonary complication, which, in its turn, was dependent upon the cardiac weakness.

Looking at the case in this way, we can understand why the digitalis and whisky were inadequate to produce a stimulant effect upon the heart. The heart muscle was so degenerated that it could not respond to the stimulants any more than a weak and exhausted horse could respond to the stimulation of the whip. The primary condition for the use of stimulants is that the heart should be capable of stimulation. In this case, it seemed as though the heart were not so.

Looking at the case as one in which a scorbutic tendency had developed gradually and very insidiously, we should expect that the results of treatment would confirm this view of the case. After the man had been in the hospital two or three days, a large dose of quinine was given with the idea of controlling the temperature. Only one dose was given, and it was after this that the temperature fell ; but your experience will not parallel a case of remittent malarial fever in which the process was arrested by twenty grains of quinine. I am inclined to consider the rise in temperature as a temporary incident in his sickness—that the quinine simply reduced the temperature for the time being, and that in the meantime the cause passed away and there was, therefore, no return of the fever. It is hardly probable that if the man had had this high temperature while at

Phoenixville, any physician would have sent him to Philadelphia.

What are we to do for our patient? On admission, the first indication which presented itself was to overcome the weakness of the heart. At that time the man certainly could not have moved about with prudence, for syncope sometimes occurs in these cases from suddenly getting out of bed, just as it does in typhoid fever. No drugs are necessary, change of diet being the most important element in the treatment. This change must be one that introduces into the system the alkaline salts which the system seems to need; in other words, the potash salts. Yet not the potash salts alone, for a meat diet is not sufficient. Patients will develop scurvy on an exclusive meat diet. A vegetable diet must be combined with the meat diet.* Lemon juice is one of the most accessible remedies. Next to this we have mashed potatoes, cabbage, and other fresh vegetables. Fresh meat is also to be employed. It is probable that the potash salts are not the only ones of which the blood is deprived. I refer to this again because some writers have advanced the idea that because, in scurvy, there is a deficiency of the potash salts in the urine, the administration of these salts is capable of curing the disease. If it were impossible to procure lemon juice or fresh vegetables, the matter might be compromised by administering the potash salts with the mineral acids.

When scurvy is diagnosed in its early stages, it rapidly responds to treatment. In many cases, a few weeks is sufficient to remove the evidences of the disease. This patient has been placed on the treatment described. In addition, we shall simply use such remedies as are calculated to improve the nutrition of the cardiac muscle. I allude to arsenic and iron.

Although there are some other interesting features about this case, I pause at this point in order to bring before you another patient, who presents a curious combination of symptoms.

You will at once notice that there is a marked disturbance of the innervation of the vascular system, and also that the manner of the patient is very excitable and nervous. The eyes are slightly staring and protruding, although this is not sufficient to prevent closure of the eyelids. At the same time, the conjunctiva is white and glistening, and the eye bright. The extremely excited action of the heart can be seen even at a

distance. When the hand is placed on the abdomen, a strong pulsation is felt. The carotids also beat violently. The thyroid body is distinctly enlarged, and on placing the hand over it a thrill is detected.

There are here three symptoms which are often associated with a disease which is known by the name of an Irish surgeon, as Graves' disease, or by the name of an English observer, as Basedow's disease; and it is also named from two of the symptoms, the protrusion of the eyes, and the enlargement of the thyroid, as exophthalmic goitre.

I desire rather to call your attention to the clinical peculiarities of this particular case, than to give a didactic lecture on exophthalmic goitre. I would merely say that the pathology of this disease is still very imperfectly understood; but the essential element of the affection is supposed to reside in the sympathetic nervous system, especially in the cervical sympathetic, and that the characteristic symptoms—that is to say, the throbbing of the blood vessels of the neck, the excited action of the heart and the protrusion of the eyeballs—are due to vaso-motor paresis, by which the vessels become dilated, and so imperfectly enervated that this throbbing of the arterial system occurs. In advanced cases there is another factor in the protrusion of the eyeballs, found in the changes which take place in the eye itself. At times, the eyes protrude so much that the lids cannot be closed, and there is a want of co-ordination between the muscles of the eye and those of the lid.

It is evident in looking at this man that there are present, to a certain degree at least, the symptoms of exophthalmic goitre. There are pulsation of the arteries, protrusion of the eyes, some enlargement of the thyroid, and extreme nervousness. I think that in a disease which has such an obscure etiology as exophthalmic goitre, we may well recall the proverb that "every swallow does not make a summer." These symptoms of incipient Graves' disease may not be expressive of that particular disease which is characterized by these symptoms in the well-marked stage.

Let us examine the history of this patient, for he has been in the hospital for several months. He was admitted for an injury to the leg. At that time, he was free from any of the symptoms which he now presents. These have developed in the house. The first symptom complained of was palpitation. When a patient comes with palpitation of the heart, you will first review the causes of functional palpitation, such as the use of tobacco or alcohol, excessive sexual indulgence,

*NOTE.—Dr. Dickenson reports a case of genuine scurvy in a girl ten years of age whose diet had for some months consisted chiefly of bread and butter, with no meat and little or no milk.

business anxieties, extreme bodily exercise, with an imperfect vascular organization, and the like. This patient does not appear to have been exposed to any of these causes of palpitation. The disease appears to have commenced with an inability to assimilate food, and for a long time he has complained of vomiting. This has not been associated with any signs of organic or inflammatory affection of the gastro-intestinal tract. The tongue is not red and raw, but has rather a natural appearance. There is no tenderness in the abdomen, although there is some pain. This pain is, I think, connected with the throbbing of the aorta. This vessel is beating constantly against the spinal column, causing a pain something like aneurism; yet it differs from aneurismal pain, in the fact that it is not especially relieved by change of position. Neither are there any of the physical signs of aneurism, as tumor and murmur. None of the conditions which predispose to aneurism are present, as syphilis, rheumatism, and alcoholism. We may therefore consider this a functional derangement of the stomach.

It remains to be seen whether we shall call this patient's condition an idiopathic derangement of the sympathetic nervous system, in which there is increased action of the accelerator nerves and paresis of the vaso-motor nerves, or whether another explanation of the case should be attempted. I should only go farther because I think it probable that something may be accomplished in the way of treatment on a different theory. So far nothing has been accomplished during the past seven months.

It seems possible to me that this condition of the sympathetic nervous system has developed in consequence of some defect in the diet which the man has received since he has been a resident of the house. The first thing is to act upon the stomach with something which will cause the food to be retained. Since it has been recognized that the vomiting is of nervous origin and not dependent on organic disease, I should first advise the use of hot water. A cup of water as hot as can be swallowed should be taken in the morning, and directly afterwards the food which has been decided upon. The most digestible food for a patient in this condition seems to me to be scraped raw meat. This is, of course, open to the objection of the possible introduction of the tape-worm, but scraped meat with vinegar is by no means an unpalatable dish. If the patient can not take this, the meat may be slightly broiled, then chopped fine and made into little cakes. If milk could be taken, this might be used. It may be

made more digestible by associating it with some of the preparations of the American Health Food Company, which I have so often recommended to you. We might start with hot water, gluten food and milk; a little later in the day, hot water and scraped beef; still later, another portion of milk and gluten food, preceded by hot water.

Failing in this, the different series of remedies to control this irritability of the stomach may be used. These include the preparations of creasote, cerium, and many others, which I shall not take time to enumerate. One is, perhaps, as good as another, and it may, at some stage of the case, be necessary to use each one. The best of these for this patient would probably be the nitrate or oxide of silver. I should first give the nitrate in combination with belladonna, and if this did not answer, substitute the oxide for the nitrate.

I shall also order for this case, after the irritability of the stomach is controlled, the use of cider-vinegar, lemon juice, and such an antiscorbutic diet as he can take, feeling that there must be something wrong with the previous treatment. With this it would be advisable to act on the sympathetic nervous system in the neck and abdomen with electricity. The patient will be placed on the treatment indicated, and when the stomachic symptoms are less prominent, we shall direct our attention more particularly to the anæmia. It would be improper to attempt to act upon this now, for the condition of the digestion would hardly tolerate the use of iron. I make this remark because salts of iron are often given in conditions of this kind. There is a time to withhold iron, as well as a time to give it.

At a subsequent clinic, I shall report the progress of this case.

COMMUNICATIONS.

INEBRIETY FROM BAD SURROUNDINGS.

BY T. D. CROTHERS, M. D.,

Superintendent Walnut Lodge, Hartford, Conn.

Lord Shaftesbury, in a speech before the House of Lords on the "Lodging House Bill," remarked that his attention had been repeatedly turned to the fact "that bad and unsanitary surroundings was a very active cause of inebriety, not only among the poor and defective classes of large cities, but among the better and more favored circles of society."

It is apparent to any one that tenement houses and their surroundings, wanting in ventilation, cleanliness, and sunlight, would of necessity les-

sen the vigor and health of its inmates, and be followed by various neurasthenic conditions for which alcohol would bring most seductive relief. The residents of such places, in most instances, are not only poisoned by the many bad conditions of living, but are under-fed, from food wanting in quality, quantity, and preparation. They are also in most cases of the defective class, with entailments of past generations of disease; and altogether inebriety seems to be a most natural outgrowth of all these conditions, giving momentary relief, and almost euthanasia, from the increasing misery and sufferings. The inebriate lifted out of these bad conditions of living, and given good food in healthy rooms, would, of course, recover more readily from his malady. All efforts in this direction to save the inebriate, and prevent inebriety, that do not begin on the physical side, with a change of surroundings, and all unsanitary states and conditions, will fail. The reformer and physician must recognize and act upon the fact that both health and disease are very largely the result of surroundings and conditions of living.

While these facts are understood and fully recognized among the occupants of tenement houses in cities, and the poor generally, they are frequently unobserved in the wealthy and better classes.

Elegant houses, luxurious furniture, and rich food, may be as thoroughly unsanitary and injurious to health as the lowest tenement in the worst locality.

Ventilation, sunlight, cleanliness, bad food, may be as marked here by their absence as elsewhere. In a consultation at the home of a wealthy inebriate, I found the victim sleeping in a room with heavy velvet curtains at the windows and about the bed; a dark closet and bath room, in which a gaslight burned all the time, opened into the room; a dry furnace heat from the basement poured into the room, and the only ventilation was into the hall equally warm. The air was charged with bay rum used in bathing, and his food was highly spiced and richly seasoned, taken any time when from whim or notion he desired it. After an evening at the theatre or club room, ending in a rich dinner with wines at midnight, he retired to this badly-ventilated room, and spent seven or eight hours in feverish, troubled sleep. A late breakfast, with various spirits, roused him up so he could go down to his office. Two hours here, then more spirits and food, a short ride, the club house and places of amusement, spirits and food, and back again to a home wretched in its

luxury. To recover in these surroundings was impossible. First of all, he needed a total change in conditions, where pure air, sunlight, and food could aid in restoration, then the removal of alcohol, and building up of the weakened brain and nerve system would be accomplished.

My purpose is to indicate that bad physical surroundings, in many cases, is a predisposing and exciting cause of inebriety among the active and better classes of society. A clinical record of some cases, which have fallen under my observation, will bring out these facts more clearly. I will divide these cases into two groups, one in which a marked neurotic tendency existed from heredity, and the other in which this was absent, or so obscure as to escape observation. The following are cases of the first group:

A., father a moderate drinker, several uncles inebriates, and mother a nervous, melancholy woman. He began life as a clerk, and by hard labor and great industry became wealthy, and at the head of the firm at forty. He was temperate and regular in all his habits, and in good health. He moved into a fashionable house, with luxurious appointments, and three years after, began to drink at night for its narcotic effect. He did not go into society, or have any intimate association with drinking men, but drank to relieve a feeling of restlessness and obscure pain. He went on swiftly from bad to worse, drinking to intoxication every night, but attending to business during the day. His disposition changed and he became more grasping in business, and less inclined to see any one. He came under my care suffering from delusions of persecution, and extremely weak, drinking all the time to intoxication if he could get spirits. All spirits were removed, and the recovery was very marked and rapid. Two months later, he resumed business; and six months after I was called to see him at his house, having relapsed and developed a mania of poisoning, supposing his wife and servants were trying to kill him in this way. He occupied a dark bed-room, heavily furnished with bed curtains, and draperies at the doors. An unventilated closet and room into which furnace heat poured without any outlet, with various other unsanitary conditions, showed clearly the cause of his inebriety.

From my advice, he moved into the country, and lived in better surroundings, and has abstained and become a temperate man since then.

It was apparent that his inebriety grew out of the unventilated surroundings, and a low state of health, producing sleeplessness and debility, for which alcohol was found to be a remedy.

Case B. was a wealthy merchant from an interior village, who moved to a fine mansion in New York, and after a few months became an inebriate, and two years later went back and reformed, and is now a temperate, sober man. He inherited a positive neurotic diathesis, but having been educated for a physician, and given great attention to building up his body, he became a vigorous, strong man. From his own statement, he became depressed, and could not sleep well at night in the city. Dyspepsia, severe neuralgias, and various functional derangements followed. He used wine and beer at first for this state, with relief; then later, stronger alcohols, until the craving for spirits was beyond all control. He found that in the country this craving was greatly reduced and could be controlled, but in the city he was powerless to resist it. He lived in the best surroundings a city could afford, but in his estimation the bad air and want of sunlight were the active causes of a lowered state of health which merged into inebriety. The change in the time of taking food was also a factor of importance. The final recovery in the former home, where all these conditions were different and more perfect, was evidence of the correctness of his views.

Case C. was still more striking as an example of this class. A manufacturer who had drunk to excess in early life, reformed and was an exemplary temperance man in the widest sense. He had two sons associated with him in business. Both of them were temperate and vigorous, and having a personal prejudice against all use of spirits, were total abstainers from principle and practice. One of them went to New York to take charge of the sales-room of the manufactory. He lived in a rich boarding-house, worked hard, did not go into society or have drinking associates. Two years after, he began to use alcohol to excess, beginning as a medicine at first, then the demand for it was imperative and irresistible at night. He was a secret drinker in his room for a long time. Then he drank in his office, and finally was intoxicated about the store. He went back home, and his brother took his place. He was under my care for three months, and recovered, and is now temperate and well, at work with his father in the manufactory.

His brother in New York boarded at the same place, and was equally hard-working, and retiring from company, and yet within a year he became an inebriate. He would drink in his room and office for two days, then reform and be sober a week, and begin again. After two years he came back home and reformed, and is now liv-

ing as before, only a very radical temperance man.

From the general evidence of the surroundings in New York, it was apparent that they were the active factors in the cause of the inebriety. The boarding-house was wanting in many essentials of healthy living, and his office was dark and badly ventilated. He dined at a saloon in the middle of the day, and ate a hearty dinner at night at the boarding place. The general strain and exhaustion of work was not relieved by food or rest, because the means to this end could not be obtained in the surroundings.

The second class or group are precisely like the first, except there is no history of heredity or previous neurosis that would predispose to this condition.

The following is a marked case: D., a lawyer, of health, and a total abstainer. No heredity was apparent, and he was extremely careful of all his work and habits of life, yet he became an inebriate after two years' residence in a flat in New York. He suffered greatly from malaria, and went up to the Catskills, where he fully recovered from both inebriety and malaria. A year later he returned to the city, and soon began to drink again. Losing all his property forced him back to his native town on the Connecticut river, where he is now living, a temperate, healthy man.

I have noted a number of similar cases, which differ only in some circumstances and incident, with the same chain of causes, producing the same results.

These causes come in general from every bad state of living, beginning with unventilated sleeping and living rooms, which are so apparent among the low tenements of the poor in large cities, and are masked and covered up in the homes of the wealthy by rich furniture, pictures, and draperies.

Extending to the nutrition and food of the very poor and very wealthy, both wanting in healthy preparation and quality to properly nourish the body. The extremes of exercise and activity meet and become active factors, and inebriety comes from it as naturally and positively as the oak comes from the acorn. The bad conditions of living in tenement houses are breeding-grounds for disease that can be seen; but equally fertile soils are found in the mansions of the wealthy, where diseases grow luxuriantly, but largely unobserved.

Inebriety, so common in the children of the very wealthy, no matter what the moral influence has been, is often traceable to low vitality and

nerve force, the direct result of unsanitary surroundings.

Of course, many other causes enter into the ætiology of each case, but this is a factor that should receive attention, and is within the power of the person to remedy and prevent.

All residents of large cities will recognize the number of healthy, temperate men in middle life, who come into the cities with property, and after a time become inebriates, lose their money, and disappear, or leave a family who contribute to the very worst elements of society.

There can be no doubt that in many cases bad surroundings contributed largely to this end—surroundings of luxury and fashion, that are wanting in the most important elements of health. If the person comes with a neurosal diathesis, he suffers more positively, and all these complex forces act as exciting causes to bring out the latent nerve defects.

Business men who are under a great strain during the day, and go home exhausted at night, must have surroundings which will bring perfect quiet and rest to both body and mind. If they do not, inebriety and a long train of maladies are invited in, and soon run into chronic forms and conditions. In these cases the first effect of bad air, and food taken at unseasonable hours, and defective in quality, is dyspepsia, and other nameless digestive troubles; bitters containing alcohol are first used with relief, then wines and strong spirits soon follow. If opium in any form is used at first, the same results, in the continuous use of the drug are seen in most cases. The inebriate who becomes alarmed at his condition, will turn to opium as a lesser evil, and from this he will go down readily. The opium case in like manner turns to alcohol to get rid of the opium mania. Probably ladies in the higher circles of society, who live in these bad unsanitary surroundings, are more often the victims of alcohol, opium, chloral, and the other narcotics, than men who are out in other conditions of living many hours of the day. The conditions favoring this are all present, and the results can not be otherwise.

A neurotic but temperate family moved from a country village to a fine residence in New York. In five years the mother was a moderate and excessive drinker at times, and two daughters used opium. The physician who reported this fact, wrote me: "I have no doubt in my mind that this was both the direct and indirect result of the surroundings and a neurotic diathesis which might have been prevented in more favorable sanitary conditions."

How far this condition of bad surroundings causes inebriety can not be accurately determined, but there are many reasons for believing that a large proportion of the alcohol and opium cases among the wealthy come from this source.

Bad company, idleness, and general fashionable dissipation, are, of course, factors of more or less prominence; but the conditions and influences of surroundings, poisoning the blood, and continually undermining the vital energies of the body, are causes largely unrecognized.

The treatment of these cases depends on the removal of all unsanitary conditions of living; and this means, in most cases, removal to the country, in large, sunny houses, where the ventilation and quiet will encourage and aid restoration.

A neurotic family are in great danger in the average wealthy mansion of the city. The reformed and restored inebriate will often find more danger in the richest city homes than in the common tenement.

The active brain-worker who neglects the sanitary condition of his home, has no prospect of long life or freedom from inebriety. Just as the child who is brought up in the low tenement, with every healthy condition of life wanting, is crippled, and all his future usefulness impaired, so the sanitary imperfections of a rich city home, and bad diet, will permanently mar and distort the future vigor of its inmates.

When the world shall comprehend that inebriety depends very much on physical conditions and surroundings, then the means for its successful treatment and prevention will be applied, and we shall be able to cope with this giant evil of the age.

HOSPITAL REPORTS.

Sayre's Extensile Splint for DISEASE OF THE ANKLE JOINT.

CLINICAL LECTURE DELIVERED AT THE BELLEVUE HOSPITAL MEDICAL COLLEGE,

BY LEWIS A. SAYRE, M. D.,
Professor of Orthopedic Surgery.

Reported by EDWARD DEVELIN, M. D.

GENTLEMEN: To day I call your attention to disease of the ankle joint. I will first make a few remarks in relation to its anatomy; this is a purely ginglymoid joint, in which there is no lateral movement. The joint is composed of three bones, namely, the tibia, fibula, and astragalus; these are held in contact by the external, internal, and posterior ligaments, the joint being lined by its synovial membrane; underneath this membrane we have the articular cartilage of the joint, which contains neither blood vessels or nerves,

but receives its nutrition by imbibition; beneath this cartilage lies the cancellous bone-tissue, which is freely supplied with blood-vessels. The tendons which pass over the joint have each a separate bursa; these may become inflamed at times, resulting, perhaps, from some injury, which may lead you to suppose the joint itself is diseased. Synovitis of this joint may occur through cold and exposure, but more frequently it is the result of a wrench or strain being followed by an acute effusion into the joint. You may also have an osteitis from the effects of a blow or concussion, which will bring about an effusion of blood into the cancellous tissue of the bone, which may be the cause of serious disease; in the course of time necrosis and caries following.

Some authors term this, chronic disease of the joint, progressive disease of the joint.

The reason why this disease is so slow in its progress, apparently assuming a chronic form, is simply because the injury which caused it was at the time very slight. A moderate amount of pressure being brought against the side of the joint may result in the extravasation of a single drop of blood into the cancellous bone-tissue; now this injury is so slight that the man may continue at his work, but this slight injury, in perhaps from six to twelve months, has then produced such marked injury as to demand attention.

In our examination, we then find increase of temperature in the part, perhaps accompanied with a semi-fluctuating feeling and intense pain upon pressure in certain positions.

The diagnosis of osteitis is not always easy; there is usually pain, and if you apply the surface thermometer, you can detect an increase of temperature; on examining the joint, by using compression and extension, you will be able to detect the disease in either ligaments or cartilage. If you stretch the ligaments, it will cause pain if the disease be in the ligaments; if the disease be in the bone, pressure upon the parts will produce intense pain. I do not believe that the disease commences in the cartilage itself, but being devoid of sensibility, it undergoes change and becomes necrotic after the bone has become diseased; the cartilage becoming absorbed, leaves the cancellous bone-tissue exposed, then the pain becomes excruciating. When the cartilage becomes ulcerated, there is a thickened condition of the synovial membrane ensuing, and its secretion becomes gelatinous and of a reddish color. If the disease be not arrested, caries of the bone takes place, and as soon as the slightest portion of the bone becomes dead it becomes a foreign body, and is the source of constant irritation until it is removed; the slow process of nature may, in time, burrow through the tissues, and thus the bone be discharged. The greatest difficulties that I have seen occurring in the ankle-joint, arise from very slight injuries.

A case that came under my treatment was that of a farmer who simply twisted his foot while plowing, and at the end of two or three years he had a diseased joint, which it was thought would require amputation. He was sent to me as a specimen of chronic disease of the joint, which is claimed to be the result of a strumous affection; but this is not so in the great majority of cases, and even in those persons of a strumous diathe-

sis it will require some injury at a special point in order to form a primary lesion. In this case a large amount of bone was removed, and following this was an extensive hemorrhage; the wound was at once filled with oakum saturated with persulphate of iron; the man finally recovered with a good, useful foot, having a perfectly movable joint.

I saw a young lady two days ago who had had her ankle locked up for two years in a plaster of Paris dressing, without affording her any relief; but on the contrary, the disease was still progressing. There had been no extension made at the time the dressing was applied; the diseased surfaces had been locked up immovably, but they were still pressing upon each other, and hence absorption of the structures was still going on. She came to me, and I at once applied the extension splint

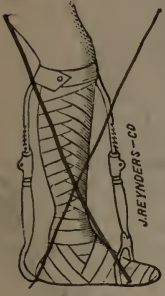
(Fig. 1), which gave her immediate relief. I removed the splint the next day, and at once the pain was as severe as before, showing that the articular surfaces being brought together caused this intense pain.

The extension splint which I use for the ankle joint you will notice consists of an iron foot-plate with an anterior and posterior rod, each composed of two pieces, sliding into each other by means of a ratchet and key. These rods extending upward to just below the knee are attached to a collar, which passes around the leg. The posterior rod, just at the heel, has a joint at that point, while the anterior one is attached to the central portion of an arch passing over the foot. Just anterior to the arch the foot-plate is divided and hinged in order to allow of flexion of the toes—the foot-plate at the heel being slightly narrower than the heel itself in order that the foot may not slide from side to side. This point must be specially attended to when ordering the instrument.

In applying this instrument, I first pass inch-wide strips of the mole-skin adhesive plaster parallel with the leg from just above the ankle to the knee, placing them almost close together all around the leg, and securing them firmly by a roller-bandage. Then placing a piece of old linen under the foot upon the foot-plate of the instrument, to absorb moisture, I secure the foot in position with adhesive plaster to the instrument, as I

here show you. (Fig. 2.) I now pass a roller bandage around the foot, over the plasters, and secure them firmly, leaving, as you observe, the ankle-joint exposed. Then securing the collar of the instrument just below the knee, I reverse the ends of the adhesive plaster over the collar, and then pass another strip of plaster around the collar over the other strips to hold them in place, supplementing the same with a roller bandage, which I pass down the leg also. You hat the instrument is firmly se-

cured, and I am prepared to make my extension, which I do by first keying out one rod and then the other, until I have reached the correct point, which affords most relief. This being done, I am now at liberty to make my compression around the joint as may be indicated, covering in the whole with a roller bandage. As the dressing is now complete, the parts are entirely covered in (Fig. 3). But always make your extension at that stage of the dressing, as I just now showed you; do not make your extension after your dressing is complete and the parts are all covered, or strangulation may occur and necessitate the instant removal of your dressing.



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ing the heat of the water borne. On removing the apply a snug bandage, and keep it on for a few days. In the morning find that this treatment when applied early.

There are also a great many by massage for a number of days to increase the circulation and cause extravasation; this, however, is an experimental treatment which will not answer in all cases. You may sometimes secure absorption of the fluid in a few days by this method; it is at all events worthy of a trial. There is no law by which you can be governed as to the treatment by this means; you are safer, therefore, to rely upon giving the joint complete rest for a little while, until the inflammatory action has subsided. In some cases it may be necessary to apply leeches or cups to lessen the amount of blood in the part; but I prefer to use the cups and prick the parts with a sharp tenotomy; by this means you avoid the bad leech-bites. Persons who have a bad diathesis do not bear leech-bites well, as it may be followed by an erysipelatous inflammation. Many of these cases of ankle-joint disease are reduced to a bad condition by the long-continued use of poultices. These solicit more blood to the part, and the foot becomes one boggy, doughy mass. Apply firm compression around the joint, and you will be surprised at the result. When the connective tissue becomes loaded with this exudation, the more it is pressed the worse it will become. When the inflammation has gone on to suppuration, do not open it, but let it out the pus; avoid the use of vessels and tendons; always use the roller bandage. If you find the foot dead, take it out, as it is then a question of time until it is removed there is no cure. Keep the limb in the horizontal position as long as the ankle throbs when you get up. Do not let them assume the position too early. You can never have a cure of the joint without a reflex action of the muscles following sooner or later. This cannot be arrested. This, of course, leads to deformity, the stronger muscles

hence the more common deformity is talipes equinus, with sometimes more or less valgus or varus. To prevent that, you should always make extension. It is absolutely necessary to secure extension as well as rest for the part, the extension being applied with sufficient force to prevent compression of the articular surfaces—the contraction of the muscles then becomes nil. Very often there is an enormous amount of effusion around the joint, which can only be relieved by firm compression. In this case, use a large wet sponge, squeezing out all the water, then bind it firmly around the joint, after which dip the joint in water or pour water over it, and the sponge absorbing the moisture will secure still greater compression. Many persons used to amputate these joints. I, however, think cases of diseased joints but seldom require amputation. Here (showing cast) is a case in which I was called upon to assist at an amputation of the ankle-joint. I came to the conclusion, after examining it, that an effort should be made to save the foot, as it appeared to be tolerably healthy. My suggestion was adopted. Extension was then made, and the foot secured in the manner described, with the most satisfactory results. The plaster-of-Paris bandage is not the best splint to be used in this disease. The diseased joint must be treated on the principle of preventing muscular contractions, with such dressing as can be easily readjusted at any time. The result in this case was a perfect and complete recovery.

Here is another case which had been condemned to amputation. Seven years ago the boy sprained his ankle; five years later I opened the joint freely, and inserted setons, also making extension upon the foot. The patient is now perfectly healthy, the treatment having resulted in the saving of the foot, with good motion.

Here also is a young girl who just a year ago was brought here with diseased ankle-joint. The same treatment was followed out, and you now observe a complete cure has been effected.

This boy now before you has been presented at a previous clinic, and you observe that with the extension splint applied, he can bear quite firm pressure upward; but there is still pain upon pressure being made laterally, as you observe. He will, however, continue under this treatment until all inflammatory action and pain has disappeared, and I have not the slightest doubt a perfect cure will be the result in his case also.

Case 3. This little child was brought to me some three months ago, suffering from disease of the ankle-joint. At that time it was characterized by that peculiar boggy feeling which I have before described in these joint diseases. In this case the extension splint has been used, and in addition the sponge has also been applied around the joint to secure additional compression. The splint has now been worn for about two months. The mother states that the child has had no pain at all, and when the instrument is properly adjusted, she can play around the house with the other children. Now you observe here that by pressure upon the child's foot I cause no pain. To-day we will omit the use of the sponge, and now, having extended the joint, I make firm compression around it by means of the adhesive plaster and the roller bandage. You thus have

the joint entirely at your control when dressed in this manner. You notice that the child cries most lustily during the dressing of the foot, but it does not cry from pain, for you see that the moment the mother takes the child it becomes perfectly quiet, and yet the foot is in just the same position; it is a cry of anger, not pain. I see no reason why this child should require any further treatment than is now given, as it is progressing most favorably.

In those cases where an abscess appears and you find excessive inflammation, you can freely open the joint and let out the pus. In diagnosing for pus, hold one finger absolutely still and gently pass the other over the inflamed surface, in a line parallel with the long axis of the muscles; do not go from side to side of your finger which is stationary, or you will be deceived by the lateral movement you cause the muscular tissue to make; but go above and below with the long axis of the muscular fibre. By this means of slight compression you will cause the pus to pass under your other finger, and thus distinctly feel the fluctuation; this is a simple, practical point. In these cases the abscesses must be thoroughly evacuated either by aspiration or free incision; if the latter, it should be freely washed out antiseptically, and filled with Peruvian balsam, and dressed with oakum; then allow your patient to get out as soon as possible. Now, if you thoroughly master the principles of this treatment, you can perform these operations equally as well as myself, and thus save the joint from amputation.

Case 4. In this boy's case the extension splint has been removed from the ankle, and in its place has been substituted a piece of sole leather which has been thoroughly wetted, and then moulded to the foot and ankle while it was extended; it was then bound securely to the joint with a roller bandage, and allowed to remain there until it had become thoroughly hardened, when it, of course, assumed the exact moulding of the parts; you then cover this leather splint on both sides with mole-skin adhesive plaster, the adhesive side out, and apply it once more to the limb, at the same time making traction upon the foot and securing the splint to the foot with a roller bandage; this being accomplished, extension is now made, and your bandage continued above the ankle up the leg; the splint is thus firmly secured, and extension of the joint maintained sufficient to prevent attrition of its surfaces.

Often, in many of these cases where you are unable to secure the leather or extension splint, you can fold a piece of paper up very tightly, then cover it with a piece of adhesive plaster from end to end, on both sides, with the adhesive side out. Then bend it to fit the anterior portion of the foot, allowing it to pass up the leg. Now fold up another piece of paper, and cover in like manner, and apply to the sole of the foot and pass up over the heel. Having placed these in position, I take a roller bandage and secure them firmly to the foot as far as the ankle. My assistant then making traction upon the foot, I continue my roller bandage above the ankle-joint and up the leg over the paper splint, the adhesive plaster holding it in position, and by this means my extension is maintained.)

< In this case before you I shall again apply my

extension splint, in order to make the adjustment more perfect. I merely show you the method of adjusting this leather or paper in such cases where you have not the opportunity of securing the iron splint. This latter, however, can always be procured from my instrument-makers, Messrs. Reynolds & Co., 309 Fourth Avenue, of this city.

Med Surg Reporter.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Iodism.

The first patient I show you, gentlemen, is the man whom you saw last Monday (page 488), who had had syphilitic ulcers on the ankles, which had been successfully treated by the mixed treatment. But while the ulcers were improving, he had developed an eczematous eruption, chiefly upon the extremities. This I supposed to be due to the iodide of potassium which he had been taking. So the drug was discontinued, and I think the result justifies the explanation which was given. For, as you see, the swelling and redness have subsided, and the eczematous surface is healing rapidly, and in a few days he will probably be entirely well. He is taking no medicine now except the citrate of potash, given to promote the elimination of the irritating poison by the kidneys. An ointment has also been used locally to lessen the irritation of the skin which attended the inflammation of its follicles.

MEDICAL SOCIETIES.

PHILADELPHIA CLINICAL SOCIETY.

Stated meeting, March 28, 1884, the President, Dr. Henry Beates, jr., in the chair.

Dr. Daniel Longaker reported a case of

Sudden Death in Diphtheria.

The patient, Mary F., æt. 6 years, was seen first on the afternoon of the second day of the disease. Her temperature was 104°⁰, and the general symptoms were of a decidedly adynamic type. She complained of pain and difficulty in deglutition, and a nasal tone of the voice was noticed. On inspection of the throat congestion and swelling were evident, and a small patch of false membrane was found on the right tonsil. The local trouble continued to grow worse until the fourth day, and was associated with a diminished secretion of urine, in which albumen was found to be present. The membrane was detached on the sixth day, and by the tenth convalescence was established. On the thirteenth day she was seen for the last time. Her pulse was a little accelerated in frequency, and still weak. Her appetite was good, and she was sitting up and going down stairs. Two days later, the fifteenth of the disease, after rising in the morning and feeling quite well, she suddenly fell from the chair from which she was attempting to rise, and expired.

Dr. Joseph S. Gibb read a paper on

Umbilical Hemorrhage.

In the preliminary remarks he spoke of the neglect of medical writers in omitting this important topic from their works, in spite of the oft-repeated mention of this negligence by individual observers, who, while investigating, have sought in vain in most of the standard works of the day for some account of this accident. Notable exceptions to this are the works of Simpson, Condie, and more particularly Dr. Bedford, of New York. The author spoke of the rarity of the accident, and proved the same by reference to the records of maternity hospitals and foundling asylums, and also by the experience of the older members of the profession, and finally presented a collection of 241 cases, which represented those which have been published since 1752.

The author's case was a female child of a "bleeder" mother. Hemorrhage began on third day from birth. No single bleeding-point was observed. The hemorrhage was simply a continuous oozing from the bottom of umbilical depression. Several ligatures were applied directly to the cord, and then the ligature en masse, all of which failed to control hemorrhage. This was finally accomplished by a solution of the sub-sulphate of iron painted over umbilicus, and a pledget of cotton saturated with same solution bound fast over umbilicus. The child suffered considerably from the profuse bleeding, though soon rallied after its cessation. Was strong and healthy when last seen, one month from date of accident. There were no premonitory or accompanying symptoms. It was simply a spontaneous umbilical hemorrhage.

The author makes three divisions of the subject:

1. Hemorrhage from improper ligation of cord.
2. Hemorrhage, the result of traumatism.
3. Spontaneous hemorrhage.

The first two received but cursory attention, the cause and remedy being apparent. The third variety formed the true basis of the paper. He did not believe that any of the so-called premonitory symptoms, viz., colicky pains, jaundice, etc., can be relied on as such, but thought they may occur in otherwise healthy infants, or precede other affections. However, he laid stress on the fact of a hemorrhagic diathesis existing in either parent, and believed this should make us watchful. He regarded the subjects of umbilical hemorrhage as those suffering from a general disease, and hemorrhage the first symptom of this disease. This symptom may occur at any time from a few hours to eight weeks after birth. The next most important symptom is jaundice. Both of these symptoms occur in an equal number of cases.

As regards the etiology, the author believed there is a direct relationship between the hemorrhage and some constitutional condition of infant, which condition may be either hereditary or congenital. The hemorrhagic diathesis was given a first place in the list of causes. It is not considered absolutely necessary to invoke the aid of the hemorrhagic diathesis in the parent to establish the existence of this condition in the offspring; in other words, it may be congenital. Attention was drawn to the hemorrhagic symptoms in these cases, viz., hemorrhage from bowels, gums, and penis, as proof of this peculiar condition being a strong etiological factor.

Jaundice was mentioned as forming the favorite ground of most writers on the subject as a causation of umbilical hemorrhage, but the theories on which this is based were not regarded as substantiated by post-mortem examinations. In but few of the recorded cases were there any indications of a syphilitic or scrofulous taint. Various other minor causative influences were noted, viz., excessive use of alkalis by pregnant women, insufficient food, etc.

In conclusion, it was admitted that in the present crude state of our knowledge of umbilical hemorrhage, we are obliged to admit several etiological factors.

In an analysis of the reported cases, there is found to be a strong predisposition on the part of the male to the occurrence of this accident. In 115 cases collected where the sex is mentioned, 67 per cent. were males.

The morbid anatomy of the subject is very incomplete, being made up of statistics as to the potency or non-potency of the fetal openings and vessels, the condition of the liver, and the character of the blood—from all of which no satisfactory conclusion can be drawn. The prognosis of umbilical hemorrhage was stated as excessively grave—a mortality of 83 per cent. in 230 cases. The fatal termination may occur at any period, from one hour to eight weeks from commencement of bleeding. In 94 cases, where the time of death has been stated, 47 or 50 per cent. occurred within first 48 hours—twenty-five in the first, and twenty-two in the second twenty-four hours.

The success of therapeutical measures the author believes lies in a proper appreciation of the nature and causes of the disease; and until this is accurately determined, umbilical hemorrhage will continue to resist all well-meant therapeutical resources.

In the present state of our knowledge, the author believed that that treatment will be the most successful which consists of local styptics, ligature, etc., combined with such internal hemostatics and tonics as experience has proven of value in kindred hemorrhagic affections of adults.

Dr. Albert H. Smith, in opening the discussion, said:

"I have seen two cases of the kind referred to by the reader of the paper. The first occurred at the end of 24 hours after birth, in a healthy child. On attention being called to it, the ligature was found loose; this was reapplied carefully. On the following morning the nurse again discovered hemorrhage, and the child died before I could reach the house. This was not a case of neglect or traumatism. The other instance occurred also in a perfectly healthy child 48 hours old. The cord was ligated by myself, but I soon found hemorrhage occurring freely from the tissue around cord; a large compress of absorbent cotton was applied by means of Seabury & Johnson's plaster, and a teaspoonful of magnesia given internally. The child was saved. In these two cases there were no hereditary tendencies to this form of trouble; no jaundice; no purpura hemorrhagica in either the mothers or the infants themselves. We have not so far reached any reasonable theory of its etiology. Jaundice seems a coincidence. Great stress has been laid on hæmophilia, but my experience does not bear it

out. In a family under my care four out of five died of hemorrhage, but none showed any tendency to umbilical hemorrhage. In the autopsies of fatal cases no uniform non-persistent conditions have been found. My cases are somewhat remarkable from the fact that recoveries are rare.

"In the treatment we could hardly expect a compress to do much, yet I think this application the best that can be made. A laxative would contribute to lessen blood pressure and act as a revulsive.

"I would suggest that hemorrhage from non-application of a ligature would rarely occur in health, if we are to judge by the fact that in Germany they seldom tie the cord. Difficulty may certainly arise from too early ligation. My practice is not to ligate until the cut extremity has ceased bleeding."

Dr. Charles K. Mills. "I have had one very interesting case of umbilical hemorrhage which recovered. The subject was the fourth child of perfectly healthy parents, the other three children being healthy. There was no trouble until the third day after birth, when an oozing was found at umbilicus, and the child vomited blood; the cord was examined and found not bleeding at the extremity; subsequently styptics were applied, without result; the hematemeses occurred on three occasions during the following twenty-four hours of occasional hemorrhage. The bleeding was finally controlled by transfixion with needles, and a half drop of amm. sulph. acid administered every two hours. The child recovered, and is now perfectly healthy."

Dr. Hannah T. Croasdale. "I have had the opportunity of seeing but two cases of umbilical hemorrhage. The first was from shrinkage of the cord and great amount of gelatinous material. After the ligature was closely reapplied, the bleeding began again from the cut extremity. I then applied Peau's hæmostatic forceps, and left them in position twenty hours. In the other case the hemorrhage was controlled by tightening the ligature."

Dr. Mary Willits. "To the cases mentioned, I would add one seen by myself in hospital. The child was a week or ten days old. After considerable hemorrhage, the bleeding was successfully checked by styptics and a compress."

Dr. Henry Beates, jr. "In connection with the hematemeses noticed by Dr. Mills, a case seen by myself showed at the autopsy gangrene of the ilium. There was also sloughing at the extremity of the cord."

Dr. Joseph S. Gibb. "I am grateful to the members for the relation of their experience with this troublesome affection. The relation of the hemorrhagic diathesis to it is yet a question. There seem, however, to be two things intimately connected with it—the hemorrhagic diathesis, and jaundice. The case reported by Dr. Mills would rather support the former theory. It is evident that loosening the ligature would be a dangerous experiment in some of these cases."

Dr. Collins exhibited a bullet that had been removed from the anterior nares of a man. It had remained embedded in the turbinated bones since 1865. An opening in nasal septum remains, produced at time of reception of wound.

NEW YORK NEUROLOGICAL SOCIETY.

Stated meeting, March 4, 1884, W. J. Morton, President, in the chair.

First paper:

Dr. C. L. Dana read a paper upon "Morbid Somnolence,"* relating a number of histories illustrating different forms of this affection. These forms are classified as follows:

1. Epileptoid sleeping-states.
2. Hysteroid sleeping-states, including (a) spontaneous or "mesmeric" sleep, (b) trance and lethargic states.
3. Morbid somnolence, the expression of a distinct neurosis. (Narcolepsy.)
4. Unclassified forms.

The speaker's first case (illustrating class 3) was that of a young man of wealthy family and personal history, who would go to bed at the ordinary hour and could not be roused till noon, or afternoon, or evening of the next day. This would continue for a week or two, when the symptoms would remit.

A second case (illustrating class 2) was that of a young lady who had short attacks of catalepsy, cataleptic *petit-mal*, alternating with sudden attacks of sleep. These came on several times daily. Three other cases (illustrating class 3) were of neurasthenic persons who for several months had persistent drowsiness, not attributable to any nutritive or organic disorder.

Dr. Dana also reported a case furnished by Dr. L. Putzel, illustrating the epileptoid sleeping states.

Discussion on Dr. Dana's Paper.

Dr. Wm. M. Leszynsky: "I know of two cases which might be termed a mild form of morbid somnolence, where the patient would fall asleep at almost any hour of the day, while reading or conversing, the sleep lasting at times for an hour or more. The cause of this somnolence seemed to me to be undoubtedly due to faulty assimilation of food, and was cured by the use of nitro-muriatic acid, etc."

Dr. Weber: "I have seen but a few cases. In diabetes, morbid somnolence is believed to be a prominent symptom. I have seen twenty or thirty of such cases, well pronounced, but have not seen one case where morbid somnolence prevailed; on the contrary, the patients did not sleep as much as normal. I remember two cases of locomotor ataxia, in which there was a great tendency to prolonged sleep; in one of these cases, the man would sleep often fifteen hours at a time.

"I have observed sopor in chronic endarteritis, in a number of cases, especially in cases where the condition of cerebral arteries tends to apoplexy. There was one man who would fall asleep during dinner, be taken up to bed, and there sleep till the next day."

Drs. Roberts and C. E. Nelson made remarks, giving cases, as to making up sleep-time after prolonged vigil; Dr. Roberts remarked that sopor was met with in his case of myxœdema, read previously before this society, and published in this journal; in such cases, sopor is recognized as a symptom of disease.

*This paper will appear in full in the April number of the Journal of Nervous and Mental Diseases.

Dr. Shaw (of Brooklyn) related a case of a man who would fall asleep in the clinic.

Dr. R. B. Prescott said: "I have one case bearing on this subject, Mr. President, which came into mind while Dr. Dana was reading his paper, and which, as it may not be altogether without interest, I will relate. It is that of a farmer, unmarried, forty years of age or more, living in a small village in Massachusetts, who, some ten years ago, began, without any apparent cause, to be troubled with excessive drowsiness. It manifested itself first in a disposition to sleep unseasonably long in the morning. He would remain in bed until long after the breakfast hour, and complain at intervals during the day of still feeling sleepy. Gradually he came to neglect the work of his farm, and remained about the house dozing away a considerable portion of the time. His social nature too underwent a decided change. He became reserved and silent. He shunned all intercourse with friends and acquaintances, was with difficulty made to answer ordinary questions, and was easily moved to tears. On one occasion I was told that he fell asleep on his wagon while taking a load of produce to the nearest market town, and slept soundly for many hours, his horse having of his own will taken an unfrequented road, and finally stopped at the place where he was discovered, the driver still fast asleep.

"His condition at present is that of a gradually deepening mental lethargy. He passes a large portion of his time in bed, and takes little interest in what takes place around him, though at times he partially arouses and will read the newspapers or carry on a brief conversation, mainly in monosyllabic replies to questions. His bodily functions are all normal, and there is no evidence of any physical disease. His general health was good up to the time of the appearance of this morbid somnolency, and he is not the subject of any hereditary taint so far as known. He is now regarded by those who know him as mildly insane, and his recovery is not expected."

The President said: "I have seen and treated but one of these very peculiar cases, which I should be willing, following Dr. Dana's lines of diagnosis, to classify as true morbid somnolence. Of course, those who sleep after prolonged forced wakefulness do not fall within the author's categories.

"As an instance of simple sleep of this nature I well remember of sleeping twenty-four hours without a moment of recollected consciousness after two days and two nights in the saddle during a time of great danger. This may be said to be simply normal somnolence. The case of morbid somnolence I refer to was that of a physician in this city, who had suffered from this condition for fifteen years. He was habitually overcome by an uncontrollable desire to sleep during the day time, no matter how *mal apropos* the time or place; this desire he would fight against with all his power of control, but would finally yield to sopor. Even in the dentist's chair, while a sensitive tooth was being 'scraped,' he had fallen asleep. Often in the rounds of daily practice he would feel this lethargy creeping over him at critical moments, as for instance when his services were most needed at a confinement, and

would be forced to yield to it and sleep. It was impossible for the same reason for him to read or study—in fact, life was becoming to him a soporific blank.

"Other symptoms were forgetfulness, frontal and occipital headache, a general malaise, great sense of weariness, palpitation of the heart on active exercise, and prostatic irritation. He had been examined time and time again by friends of eminence in the medical profession for organic disease, and none existed. The urine especially had been the subject of careful tests. I repeated these examinations, with no better results. Malaria was out of the question. I treated this patient on the basis of a profound anemia—gave him large and increasing doses of iron (Bland's pills) until he was taking thirty grains three times daily—gave him additionally, glonoin. Under this treatment he improved wonderfully, and at his last visit several months ago he reported that he seldom fell asleep during the day."

Dr. Dana, in closing the discussion, gave a similar case to the English farmer; this case would have periods of remission for several years. These cases are supposed to end in insanity. There is persistent drowsiness in diabetes, and in syphilis; also, previous to attacks of epilepsy. There is recognized a "sleeping sickness" in Africa; the French authority, Ballet, mentions these conditions.

Second paper—"Treatment of Wry Neck by Sulphate of Atropia." By W. M. Leszynsky, M. D.

The reader related the history in the case of a young woman whose occupation being that of a bookfolder, she was obliged to turn her head very frequently toward the left side. The right sternocleidomastoid and trapezius muscles became affected with a very severe form of clonic spasm which almost exhausted the strength of the patient. The treatment adopted was the daily injection of sulphate of atropia into the contracting muscles, beginning with gr. 1-80 and gradually increasing to gr. 1-6, which maximum dose was continued four days, when recovery supervened.

In addition to the atropia, galvanism was used, and the faradic current was applied to the opposite side.

(To be continued.)

Easy Writing.

The London *Lancet* very sensibly says: "Brain tension is not a proof of strength, but of weakness. The knit brow, straining eyes, and fixed attention of the scholar are not tokens of power, but of effort. The intellectual man with a strong mind does his brain-work easily. Tension is friction, and the moment the toil of a growing brain becomes laborious, it should cease. We are unfortunately so accustomed to see brain-work done with an effort, that we have come to associate effort with work, and to regard tension as something tolerable, if not natural. As a matter of fact, no man should ever knit his brow as he thinks, or in any way evince effort as he works. The best brain-work is done easily, with calm spirit and equable temper, and in jaunty mood. All else is the toil of a weak or ill-developed brain straining to accomplish a task which is relatively too great for it."

EDITORIAL DEPARTMENT.

PERISCOPE.

The Radical Cure of Hernia.

We take the following from the *Med. Times and Gaz.*, December 29, 1883:

The radical cure of hernia has, until within the last few years, been a comparatively rare operation. Five years ago Wood's operation was occasionally performed, and Wutzer's operation only served to test the knowledge of the student. In the Liverpool Medical Society, on December 20, a discussion which arose on a paper on this subject by Mr. G. G. Hamilton elicited the fact that within the last three or four years about a hundred and fifty radical cures have been performed by the surgeons of that city. Mr. Banks has performed between fifty and sixty, Dr. Alexander about thirty, Mr. Rushton Parker twenty-eight, the Surgeons of the Northern Hospital fourteen, whilst Messrs. Pughe, Rawdon, and others, have operated on smaller numbers. The mortality has been *nil*, and the successes highly satisfactory to all, as far as time has enabled them to judge. The operation consists in tying the neck of the sac, and severing the neck thus tied from the rest of the sac. Mr. Rushton Parker stops here, and has had a success quite satisfactory to himself. Dr. Alexander adopted that method for a time, but he now joins all the other surgeons in dissecting out the severed sac, because it makes the cicatrix firmer, and gives a better support to the ligatured neck. In inguinal hernia especially, and to a certain extent in every variety, all the surgeons who spoke, with the exception of Mr. Parker, bring together by suture the fascial boundaries of the opening, which in inguinal hernia are formed by the pillars of the ring. Mr. Parker would only do this in exceptional cases. As to the material to be used for tying the neck of the sac and suturing the pillars of the ring, there was wide diversity of practice. In the Northern Hospital cases which were performed by Mr. Manifold, Mr. Puzey, Dr. Macfie Campbell, and Mr. Damar Harrison, chromic catgut was generally used for both purposes. Mr. Banks ties the neck of the sac with chromic gut, and brings the pillars of the ring together with silver-wire sutures, which are to be retained indefinitely. If the sutures irritate, all the better, as they can then be removed. If they do not irritate, it is still well, as they will always maintain their hold. Dr. Alexander uses catgut for the neck of the sac, and silver-wire sutures for the pillars of the ring. He removes these sutures before the wound closes, and looks with favor on healing by granulation. Mr. G. G. Hamilton recommended fishing gut or sulphurous gut for both purposes; and Mr. Rhinallt Pughe spoke highly of the latter as being pliable and making a firm knot. It was therefore evident that good results could be obtained by any of these methods, and that the kind of suture was not essential. This method of radical cure is capable of being performed in all kinds of hernia, reducible or irreducible. In all cases, the sac having been dissected out from its surroundings, and especially

from the cord in male inguinal hernia, is opened, and, if irreducible, the contents explored, the adhesions severed, and omentum removed if necessary. Mr. Banks and Dr. Alexander have successfully removed great masses of adherent omentum in this manner. In reducible hernia the sac is always opened, to see that the hernia is *completely* reduced. This free opening of the sac is not, therefore, new in Liverpool, although Mr. Lawson Tait, in the last number of the *Birmingham Medical Review*, puts it forward as a new practice in that town. Mr. Banks described in great detail the cases suitable for operation. It need not be performed in young children except under exceptional circumstances, as a truss generally cures such cases before puberty was reached. The exceptional circumstances were a very wide opening, or the presence of the disease debaring an orphan from a charity school, or inability or dislike to wearing a truss. In adults it should only be performed in omental hernia and in hernia complicated with undescended testis, on account of the exceptional danger of such cases. In ordinary cases of reducible hernia he would not operate unless life was rendered miserable by the disease, or the patient was thereby unfitted for work. When a well-fitting truss completely relieved the patient, he would not recommend an operation. As to the after-treatment, all agreed upon the advantages of a prolonged rest in bed for at least three weeks. Some of Mr. Parker's cases were up in ten days, and others in fourteen days, and he now believes that these periods were too short. In most of the cases no appliance was used afterwards. Mr. Banks, however, recommends a light truss to be always worn after operation. He does not believe in a *radical cure* of hernia in the sense of the patient being as strong in the region operated on as a perfectly healthy man would be. The wearing of the truss is no discredit to the benefits of the operation, and is an additional security to the patient. The results at the Northern Hospital were, up to the present time, ten cures and two failures. In two cases the interval was under six months, and therefore the question of cure could not be entertained; they had not failed. The dressing varied as much as the kinds of ligature and suture. Mr. Rushton Parker first introduced the operation into Liverpool, and thought the idea was new to others, as it was original with himself. He afterwards found that it had been performed by Dr. Macleod, of Calcutta, by Drs. Annandale and Buchanan, and by some others. In the successful and frequent application of the operation, it will be seen that Liverpool occupies an exceptional place. According to some writers in the medical journals, the operation is almost unknown in many places.

Epileptic Convulsions with very Slow Pulse.

Dr. Charles Boyce reports the following interesting case in the *Brit. Med. Jour.*, March 8, 1884:

E. B., aged 28, a strong, muscular man, had served for a short time in the county police force, and claimed his discharge two months ago, but

not from any ill health. He had never received any injury to the head. He suffered from syphilis two and a half years previously to his death. On November 25th, whilst talking to a friend, he suddenly felt a violent pain shooting through the right side of the head towards the posterior part, and, during the act of exclaiming, fell down in a convulsive fit. He soon recovered consciousness, and returned home, but, not feeling very well, went to bed. During the night, vomiting came on, and soon afterwards another convulsion. The vomiting and convulsions were repeated frequently before I saw him early on the morning of November 26th. I was informed that vomiting persisted after everything taken into the stomach, and retching continued after the stomach was empty. The tongue was clean; the bowels constipated; the pupils dilated, but acting to light. The *tache cérébrale* of Trousseau was marked; the countenance was pale; the ears were of a dull purplish color, exhibiting dilated veins and capillaries; the pulse was 24 per minute. I was informed that complaint had frequently been made during the last two months of pain in the head. I had the bowels well opened with an aperient; but no medicine which I administered was able to arrest the vomiting. Accordingly, beef-tea enemata were given.

November 27th. He passed a very restless night. Vomiting and retching were less frequent. Convulsions occurred every few minutes, whether the patient were asleep or awake. A small quantity of urine which was passed yielded, on examination, no albumen nor sugar. The pulse in the morning was 14, in the evening 24; respirations 36. During my morning visit, an epileptic convulsion took place. Tonic and clonic spasms were present. On the return of consciousness, the face becomes suffused, and the patient asked where he was. I happened to be recording the pulse immediately prior to one of these fits, and observed that it was totally absent for fifteen seconds. During the fit, it was exceedingly slow; but afterwards it beat for a few minutes with greater frequency, averaging 37, and gradually fell again to 24. On November 28th, the fits were still very frequent. He had retained a small quantity of fluid nourishment and medicine (iodide of potassium). The pulse in the morning was 37; in the evening 24; respirations 37. The patient died seven hours after the evening visit.

During this short illness, the patient made frequent complaints of want of air, asking for the windows and doors to be left wide open. Percussion of the head elicited pain in the inferior and superior postero-parietal regions, but not in other parts. Such pain, says Dr. Alexander Robertson, is often associated with disease of the skull, generally syphilitic. The congested state of the auricle, which showed up vividly in contrast with the pallid face, may have been symptomatic of some vascular excitement in the new growth, or of the cerebral membranes; and the *tache cérébrale* points to the same. The late Dr. Laycock, after a careful study of the symptomatology of the ear, came to the conclusion "that the states of the circulation, nutrition, and development of the tissues which make up the ear-lobule and cover the helix very commonly coincide with similar conditions of the encephalic tissues." (*Med. Times and Gaz.*, 1862.) The local lesion upon which these well-

defined symptoms were dependent may be pretty accurately shadowed forth from a reflection upon the physiological phenomena. The cardiac centre was involved, bringing into play the inhibitory action of the pneumogastric nerve; the pulse registering at times only 14 per minute, and being absent altogether occasionally for fifteen seconds. The pupils were dilated, showing that the centre in the brain possessed of the power of producing this symptom was probably encroached upon, as was also the respiratory centre, the respirations being 37, whilst the pulse varied from 14 to 24. Death resulted when the "nœud vital" of Flourrens was extensively involved. The history of syphilis leads us to suspect the gradual formation of a gummatous or hyperplastic neoplasm, and its situation evidently the floor of the fourth ventricle or its immediate neighborhood. The case was seen with me by Mr. George Sankey, who confirmed the diagnosis.

Multiple Cutaneous Ulceration.

In the number of the *American Journal of the Medical Sciences* for January, 1884, Dr. I. Edmondson Atkinson records a case of universal interest and almost unique character, which is closely related to that rare and remarkable disease known as symmetrical gangrene.

The symptoms were briefly a papulation and vesiculation, followed by a very superficial destruction of the epidermic structures and the most external dermal tissue. This was followed, more or less rapidly, by ulceration of progressive character, so that, in the highest degree, in a very short time, not only muscle, fibrous tissue, and cartilage, but even bone was destroyed. At no point was there gangrene in mass, if we may exclude the secondary destruction of bone, but, on the other hand, rapidly progressive and molecular gangrene. This ulceration, while showing a tendency to affect similar parts of corresponding members and regions, could hardly be termed symmetrical. The right side of the face suffered much more severely than the left, while the left upper and lower extremities were decidedly more affected than those of the right side.

The extent to which motion and sensation were impaired was indeterminate. The child lost the power of locomotion, but whether from diminished nerve influence directly, or from increasing general debility was not evident. Certainly there was no complete paralysis. Similarly with sensation, it was difficult to determine the true condition. That there was abnormal sensation was certain, but whether there was itching or paresthesia was a matter of doubt. There were no scratch marks, or was any expression of pain elicited upon handling the parts. On the other hand, there can be no doubt that the sensation of pain was decidedly blunted, as shown by insensibility to quite rough usage, and by the violence with which the child bit and rubbed her extremities, even to the production of lesions and the copious discharge of blood. This bluntness of sensation extended beyond the area of lesions, and amounted to a decided numbness. Distinct symptoms of vaso-motor disturbance were not observed; the description of the mother, however, that the extremities became dry and wrinkled, is

of significance, though it must be admitted that this was not observed while the child was under treatment. The color of the child's skin would also doubtless interfere with the recognition of vaso-motor phenomena.

As causes of this remarkable condition, Dr. Atkinson was able to include mercurial intoxication, and that from ergot or other medicaments which occasionally excite gangrene or destructive ulceration in those into whose bodies such agents have been introduced.

Dr. Atkinson thinks there can be no doubt that this disease belongs to the group of affections which the late Oscar Simon first named "multiple arthritic gangrene." According to Simon, it attacks, almost exclusively, children between one and two years old, and begins with vesicles which dry into scabs. These fall off, and leave a loss of substance of varying depth, in some cases even reaching to the bone. In all cases, cachexia may be recognized. He regards the process as a gangrene produced by a cachectic thrombosis. It is not unlike the forms of gangrene produced by ergot, morphia, or in the course of diabetes, typhus, or in paraplegics. The prognosis is good. The treatment should be principally of a tonic character.

In the absence of definite knowledge of the pathogenesis of these and kindred lesions, and in view of the unmistakable vaso-motor disturbances observable in the more pronounced forms of the affection known as symmetrical gangrene of Raynaud, Dr. Atkinson thinks we can do no better than provisionally accept the theory of Weiss, according to whom the disease is a neurosis, in which the vaso-motor centre is, from whatever cause, readily thrown into a state of hypertonus; the importance of the symptoms depending upon the dignity of the parts upon which the vascular spasm is developed. Contraction of the cutaneous arteries will produce a bloodless condition of the skin. By venous spasm is produced local cyanosis, and by contraction of the vaso-dilators local active hyperæmia. Similarly, by vascular spasm of those portions of the posterior columns standing in functional relation with the skin, will be produced nutritive disturbances of the skin and epidermic structures.

An Effective Appliance for Symphyseal Fracture of Lower Jaw.

Dr. W. J. Naismith thus writes in the *Lancet*, December 8, 1883:

On July 30 I was called, in consultation with Dr. Hewitt, of Prestwick, to a young lady patient of his, who had sustained a severe carriage accident, having been violently thrown out of a cap-sizing croydon while taking a sharp turn in the road. There was a condyloid fracture of the left humerus, which was put up in the usual manner; but, in addition, the lower jaw was fractured through the symphysis, the two segments being freely movable, and there was a transverse wound about two inches in length requiring two or three stitches, just over the mental protuberance. The wound did not communicate with the fracture. Now, what we wanted was an appliance for keeping the jaw at rest, which would also permit of free access to the wound for dressing purposes.

The ordinary gutta-percha or other moulded splints were out of the question—first, because the cutting of such a hole in the splints as would have been necessary for the wound would have practically destroyed its efficiency, and, further, we were convinced that the nervous excitable condition of the patient would not tolerate any such weighty apparatus. The lower incisors, broken across and loosened, could not be utilized for ligature, and the neighboring teeth were of such shape as to afford no hold either for silk or wire. A carefully applied four-tailed bandage quite failed to afford the necessary support to the fracture, after a fair trial of about twenty-four hours, the parts evincing much mobility, and the patient complaining of the grating of the broken surfaces. In looking over some India-rubber appliances, it struck me that a Hodge's pessary, if bent and adapted so as to comfortably enclose the chin, sufficiently padded by having a long strip of lint about an inch in breadth whipped round it, and retained in position by tapes sewn to its angles and fastened, two over the head and two round the neck, after the manner of the four-tailed bandage, might supply the conditions aimed at—namely, support of the fracture and access to the wound. This idea was carried out, and with such complete success as to seem worthy of record in the columns of the *Lancet*. Grating of the bones and restlessness ceased immediately on adjustment. position was admirably maintained throughout the progress of the case, and free access was ensured to the superficial wound. The "Hodge" to be employed should be of good size, and bent so as to allow the chin to protrude through its ellipse. Thus one bar is moulded so as to support the fracture anteriorly, the other steadies it from below, while the rounded ends afford admirable lateral pressure on each side, at a point in front of the angles of the jaw. To these rounded ends of the pessary the tapes are sewn, two on each side, over the padding (the variety of tape I used was the strong one-inch breadth used with plaster for limb extension by weights), and these tapes were secured over the head, or to a fillet, and round the neck by small buckles, which readily admit of alterations being made in the firmness of the adjustment. In the absence of buckles, the tapes may be sewed or pinned together till these can be procured. A little cotton wadding inserted here and there under the tapes to obviate any discomfort from pressure, completes the appliance.

For fractures of the inferior maxilla at or near the symphysis, with or without wound, the Hodge's pessary seems well adapted. It can be bent to fit any size of jaw, and in the qualities of comfort, lightness, and coolness compares very favorably with the solid cumbersome appliances included under the head of moulds. It is always at hand, easily carried, and does away with all necessity for the labored measurements, cuttings, and mouldings incidental to leather, poroplastic, or gutta-percha. Cases there are, of course, of this injury which do very well with an ordinary four-tailed bandage or some of its modifications, but that these do not always give satisfaction, the case I have narrated sufficiently proves, and it is well to have a more trustworthy resource to fall back upon. I desire to add, in conclusion, that our case was subsequently seen in consultation by

Professor George Buchanan, of Glasgow, who was pleased to express his unqualified approval of the method of treatment adopted.

A Case of Supposed Dislocation of the Tendon of the Long Head of the Biceps Muscle.

In the *American Journal of the Medical Sciences* for January, 1884, Dr. J. William White records a case of this very rare form of luxation, and reviews the history of the few other cases in which this accident is supposed to have occurred. He finds that the recorded evidence of the occurrence of dislocation of the tendon of the long head of the biceps muscle may be divided into two general classes:

1. The reports of clinical cases in which certain symptoms were referred by the writers to this displacement, but in which its existence was not otherwise confirmed.

2. The reports of cases in which the tendon of the biceps was found luxated at an autopsy, or during a dissection, but in many of which no clinical history was obtainable.

The study of the literature of the cases recorded leads to the conclusion that although for more than a hundred years, cases of supposed luxation of the tendon of the long head of the biceps muscle have been reported or alluded to by surgical writers, yet they have been so poorly observed or so carelessly described, that they fail altogether to carry conviction; the one case (Soden's), which possesses any strong element of probability being itself open to reasonable doubt.

The symptoms in Dr. White's own case, which led him to the conviction that there had been true traumatic luxation of the bicipital tendon, may be enumerated as follows:

1. The recognition of the bicipital groove, empty, which, if its existence be admitted, is pathognomonic.

2. Recognition of the tendon itself.

3. The inward rotation of the arm.

4. A slight depression under the tip of the acromion, a prominence of the shoulder in front, and a flattening behind.

5. Diminution in the vertical circumference of the shoulder.

6. Shortening of the arm as measured from the tip of the acromion, to the external condyle.

7. Elevation of shoulder, tilting up of acromion, and elongation and narrowing of the axilla when the arm was carried upwards.

8. The peculiar depression situated over the bicipital groove.

9. The line of ecchymosis following and strictly limited to the course of the biceps muscle.

10. A creak or "squeak," heard distinctly on carrying the elbow away from the side.

11. Flexion of the forearm on the arm was painful, the pain being sharp, lacerating, and felt at the front of the shoulder; flexion during supination was much more painful than flexion during pronation.

12. When extension of the forearm was attempted, a tense line along the edge of the biceps could be both felt and seen.

13. The pain felt over the joint was also felt along the line of the biceps as far as its insertion, and the patient still has a "drawing" sensation over that region.

14. The arm was preternaturally mobile for some time after the accident.

15. The position of the patient after the accident.

16. The character of the force producing the difficulty.

The rationale of these symptoms is very fully explained.

Wound of Knee-Joint—Application of Permanent Antiseptic Dressing—Recovery.

Dr. M. O. Bunn thus writes in the *N. C. Med. Jour.*, March, 1884:

The following case illustrates quite forcibly the value of antiseptics in the treatment of incised wounds of joints:

On December 4, 1883, was called to see a negro boy, æt. 10 years, who had just cut his knee with a drawing-knife while attempting to make an axe-handle. Found him suffering considerable pain, and on examination found that the knife had entered the knee-joint, on the outer side, just below the level of the patella, slightly injuring that bone in its upward course, and very nearly severing the flap of tissue (which was about one and a half inches in diameter, and of circular form) from the leg.

Having none of the paraphernalia of Lister at hand, we concluded to extemporize. The wound and leg were cleansed as thoroughly as possible, first with castile soap and water, and afterwards with a carbolyzed solution (1 part acid in 40 of water). A sponge saturated with the lotion was then placed over the wound, while the other appliances were being prepared.

Procuring some cotton batting, it was placed between the folds of a handkerchief, and thoroughly saturated with the carbolyzed solution. Bandages of white homespun were treated with it also. Then, after placing several carbolyzed silk sutures into the lips of the wound, coaptating it as evenly as possible, the whole knee was enveloped in the batting, from which the excess of water had previously been pressed. Upon this the bandages were applied, at first loosely, then gradually more snugly, until the limb was covered by six or seven thicknesses of cloth, from about six inches above the knee to about six inches below it. This completed the dressing.

Fearing a stiff knee, and wishing to keep the boy quiet, a long Liston splint was applied, omitting the perineal strap, and the patient placed in bed, with orders to keep quiet. He did not develop any untoward symptoms, the temperature did not reach at any time over 101° F., and the dressing was not disturbed until the twelfth day after application. Upon removal repair was found complete, and not over a teaspoonful of discharge had accumulated in the batting. The knee was not stiff in the least, and the boy is now as well as ever, one month since the accident.

The case furnishes two important deductions:

1. We may secure good results without recourse to absolute Listerism, by careful attention to the thorough cleansing of parts before wounds are closed.

2. Even the country practitioner may not think it impossible or improbable to secure, in this class of injuries, union by first intention, if he will use properly the means at hand, supplemented by the

judicious use of antiseptics, and by careful attention to after-treatment.

Rupture of Bladder, Dislocation of the Knee, and Compound Fracture of Both Lower Limbs.

Dr. Cottenham Farmer reports this case in the *Brit. Med. Jour.*, March 1, 1884:

On July 4, I was called to an accident which had occurred at the local railway station. On arrival, I found a lad, aged fifteen years, in the following condition: He was blanched, and the surface of the skin was quite cold; he was conscious, and complained of great abdominal pain and an extreme desire to pass urine. There was tenderness on pressure over the lower part of the abdomen, and, on passing a catheter, about two ounces of bloody urine were drawn off, but without relieving his desire. The catheter was thereupon tied in, under the full impression that grave injury, probably rupture, existed. Further examination was then made, chloroform having been given. There was a compound comminuted fracture of the lower third of the right leg, with loss of blood from the wound, and dislocation at the knee-joint. There was also a compound and much comminuted fracture of the left leg.

The following treatment was at once adopted: Both wounds were covered with dry absorbent wool, and then the legs, to above the knee, were enveloped in Southall's pads. These were strengthened with soaked millboard splints, and the whole was firmly and evenly bandaged from the toes to above the knee-joints. The dislocation was then reduced. The boy was then carried to bed, and the legs placed in Lawrence's cradle-splints, and these were swung by ropes suspended from the ceiling, so as to ensure to the limbs the freest possible movement. Opium was administered during the night, and poultices were applied to the abdomen.

On the 5th, the patient complained only of abdominal pain. There was great tenderness over the pubes. The urine passed through the catheter less tinged with blood. Next day the urine was clear; there was still suprapubic pain.

On the 14th, the catheter was withdrawn, and he passed urine freely and with little pain. His legs had never given him the least discomfort; but, at the suggestion of my partner, on the 14th instant I cut open the bandages and exposed the limb. Never having seen a fracture so treated, I was astonished at its appearance. It looked quite natural; the wound had healed, nor was there even a trace of ecchymosis; the bones appeared firm and free from pain on pressure. The splints were reapplied on the 20th. Owing to a disagreeable smell, I opened and exposed the left leg, finding the following condition: The limb looked in every way healthy, but on its inner aspect, lying thoroughly exposed, and without the slightest signs of inflammatory action, was a large piece of the tibia (over two and a half inches in length). This I seized and lifted out of its bed, leaving a healthy-looking wound, which progressed rapidly towards healing.

On August 16, both legs were put up in plaster of Paris, and he left for home. He has since resumed his work.

The case may be of interest to surgeons, not only on account of the pelvic injury, but to the

satisfactory result of a plan of treating the most serious fractures, not as yet, I think, sufficiently recognized or adopted.

Glaucoma Treated by Forcible Tearing of External Nasal Nerve.

The *Edinburgh Medical Journal*, March, 1884, quoting from the *Annales d'Oculistique*, says:

Badal, encouraged by the cure of a case of ozæna associated with violent neuralgia of the upper and middle branches of the fifth, which followed a tearing of the nasal nerve, has for the last year treated all cases of glaucoma, in which operative interference seemed at all advisable, in the same way. The theory which led him to adopt this novel treatment is that "the increased tension is manifestly the result of a breach of equilibrium between the secretion and elimination of the intra-ocular fluids; we should therefore be able to remedy this by acting on the vasomotor or secretory functions, and we may be permitted to suppose, from analogy with the above case, that the elongation of the nasal nerve in preference to any other would produce the desired result;" and he adds that "this hypothesis has been confirmed by clinical experience." He prefers tearing the nerve, as this can be done very easily by merely cutting down in its vicinity, and seizing the tissues round about and including it with a hook, which is then made to tear its way out, the bleeding from the accompanying artery being so slight as to be of no consequence. When this operation is not effectual, Badal thinks the next thing to do is to stretch one of the other branches of the fifth. He observes that "whether the surgical trauma acts on the terminations of the ciliary nerves, as in sclerotomy, iridectomy, or Hancock's operation, or on the nerve trunk, as in stretching, the effect will be the same. But we may imagine that the chances of cure would depend to a certain extent on the number of nerve fibres involved." In this way he explains the superiority of iridectomy over a limited sclerotomy, and of the tearing of the nasal nerve over iridectomy. The cutaneous anæsthesia caused by the rupture of the nerve is too limited in extent to be of any importance. The results obtained are as follows: In 25 cases of glaucoma, not selected, but taken just as they came, the tearing of the nasal nerve produced tension in 19. In 20 of the cases in which the glaucoma was acute or sub-acute, the operation caused very speedily, and sometimes almost instantaneously, a cessation of the pain. In 4 of these cases iridectomy had aggravated the condition. In 4 cases a previous iridectomy, and in 6 a previous sclerotomy, had failed. Of 2 cases of acute glaucoma the cure was rapid and complete in 1, while in the other the vision did not return. In 6 other cases in which the vision had been for long lost or almost abolished, 3 recovered sufficient acuity to be able to guide themselves (!) Finally, in the cases in which the operation advocated failed, a subsequent sclerotomy or iridectomy was no more successful; and further, the tearing of the nerve never produced any aggravation in the existing condition, even when unsuccessful in affecting an amelioration. Badal recommends his operation for all cases of glaucoma, without exception, as the one most likely to have a favorable influence on the disease; and only in

very acute cases, where there is a very urgent indication to bring about a diminution in the intra-ocular tension, does he admit the advisability of combining it with any other procedure. Even this should be no more than paracentesis. From the above description it is clear that, should the results obtained by others equal those of Badal, the operation of tearing out the nasal nerve will not be long in being adopted as the principal cure for glaucoma.

On a Mode of Identifying the Upper and Lower Ends of any given Piece of Small Intestine.

Dr. R. Frank Rand contributes the following practical paper to the *Lancet*, December 22, 1883:

"It is confessedly difficult to determine the course, as between duodenum and cæcum, of any portion of the small bowel which may present when an opening is made into the abdominal cavity; as, for example, in a section made for the relief of intestinal obstruction. Operators have ere this passed feet of intestine through their hands, uncertain as to whether they were proceeding upwards or downwards in the direction of the length of the tube.

"In those cases where an opening is made into the abdominal cavity sufficiently large to admit the hand, the mesentery may be taken as a sure clue, if the attachment of its root be borne in mind. This attachment, it will be remembered, runs along the front of the spinal column in an oblique line from the left side of the second lumbar vertebra to the right sacro-iliac synchondrosis; it corresponds roughly with the long axis of the trunk. Above, it comes into relation with the upper end of the small intestine at the commencement of the jejunum; below, it leaves it at the cæcum. At the spine the two surfaces of the mesentery face laterally right and left; further out, their arrangement, like that of the bowel, is constantly varying. As we may speak of a right and of a left surface as regards the mesentery, so may we, none the less, as regards the bowel. It is difficult to identify the right and left sides of the bowel, but those of the mesentery are, at its root, self-evident, for here it occupies but some six inches in extent of length, whilst at its periphery it reins in some nineteen feet or so of tube. The right and left sides of the bowel having been identified, a knowledge of the proximal and distal ends follows in necessary sequence. The peritoneal cavity having been opened at any point in the anterior abdominal wall, the first piece of small bowel presenting may be seized; its long axis being held in the long axis of the body, and its attached mesentery being pulled out taut from the spine, the hand may be passed, guided by the mesentery, backwards to the spine, when it may be passed upwards and downwards without hindrance along its spinal attachment. If the bowel is being held in its true direction, the hand passed to the right of it will be conducted by the mesentery to the right side of the spinal column, and, passed to the left of it, it will be conducted to the left side; but should the apparently upper end of the bowel be not really so, the hand in passing to its right side will be conducted by the mesentery over to the left side of the spine, and, conversely, if passed to its left side will be conducted over to

the right; in either case the hand being passed upwards and downwards to identify the mesenteric root. Nothing can be simpler in practice, as may be found by making trial and test in the post-mortem room. I have no doubt this method has been used in the past, but having found no record of it, have thought it worthy of mention."

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

Medical Diagnosis, with Special Reference to Practical Medicine. By J. M. Da Costa, M. D., LL. D., etc. Sixth edition (revised). 8vo., pp. 967. Price, cloth, \$6.00. J. B. Lippincott & Co.

So long has this work been a favorite standard with the medical profession that it leaves little for the reviewer to do than to announce that a new edition has appeared. The whole of the text has been revised, and new matter has been introduced into many of the chapters. A number of woodcuts have also been added. These additions have brought the work up to the latest demands of science, and will undoubtedly secure for it a renewed welcome from the medical public.

A Manual of Psychological Medicine and Allied Nervous Diseases. By Edward C. Mann, M. D., etc. 8vo., pp. 699. Philadelphia: P. Blakiston, Son & Co.

It is doing considerable violence to the term "a manual" to apply it to a bulky, large octavo which weighs about four pounds! And when the author, in his preface, speaks of the "concise form" of his treatise, he must have had some ponderous folio of antiquity in his mind as a standard of comparison. There is a great deal, in fact, in his work which the general practitioner, desiring to learn the most in the least time, could well dispense with; but for those specially interested in the subject, this will be a recommendation.

The earlier chapters treat of insanity in general, its etiology, prevention, and diagnosis. The tests of legal responsibility are fully stated. The varieties, idiocy, dementia, and general paralysis are described, and the obscure questions of histological pathology in this connection are stated, if not answered. The second part has several excellent chapters on modern nervous diseases, the evolutionary development of the nervous system, and on the special diseases, dipsomania, hysteria, epilepsy, hysterio-epilepsy, chorea, vertigo, anæmia, neuralgia, etc. A chapter on the psychology of crime is replete with thoughtful views, well worthy the attention both of physicians and jurists. Several phototype plates and other illustrations add to the value of the work.

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A WEEKLY JOURNAL,
ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D., } EDITORS.

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EXERCISE VS. DRUGS.

The leading minds in the profession are gradually and surely commencing to realize that the hygienic treatment of disease is entitled to a much higher place in our estimation than is usually accorded to it. A rational and intelligent combination of the use of drugs and hygiene is the ultimatum to which we should direct our efforts, and by so doing we will much more fully and satisfactorily accomplish our mission than by adhering to the blind, routine drug treatment of disease, which, though in reality a thing of the past, yet has many advocates in the profession.

Dr. S. Weir Mitchell's exalted reputation rests mainly upon a true conception and an intelligent carrying out of this principle, and the same may be said of nearly all the more eminent men in our ranks.

It is but common sense to believe that did all the organs of the body thoroughly functionate, so to speak, did they all perform their allotted tasks, disease would be unknown; and it is also well admitted that exercise is a most potent agent in maintaining the functional activity of these organs.

Hence, reasoning from these premises, it is but logical to infer that when any organ or system has become deranged, such exercise as will stimulate to healthy activity this particular organ or system, will do much to restore the healthy, normal standard.

We have known many cases of constipation that have persistently defied the use of an almost endless variety of drugs, to thoroughly yield to a series of brisk daily walks. One of the greatest evils of American life is the apparent antipathy to well-regulated exercise, which among our English brethren is so thoroughly believed in; for want of it, our organs refuse to perform their duty, they become torpid, and languid, and lazy, and we thus become easy prey to the inroads of disease.

When, therefore, a patient consults us and we find that he has some functional derangement of some organ or system, let us, along with our prescription, recommend such exercise as is best cal-

culated to increase the activity of this particular part. Exercise really means motion, and we can advise that which will serve to bring into motion the part that has been rendered functionally weak through the want of motion. For all classes, walking is pre-eminently the most beneficial of all forms of exercise; and since it costs nothing, it can be recommended to the poorest of our patients.

THE EDUCATION OF CHILDREN.

An attack upon the custom of sending young children to school was recently made by Dr. Howie, a physician of Liverpool, before one of the medical societies there. He carried his views so far as to say that no child under twelve years of age ought to be called upon to perform any kind of work, whether muscular or mental. That four hours *mental exercise* is enough, twelve hours in bed, four hours for meals, etc., and four for muscular exercise. That much as he believed in education as a means of national improvement, yet it would be better to leave the masses uneducated, than to train their minds at the expense of muscular strength and dexterity. Reading and writing, although extremely important, yet were not absolutely essential to the highest education; that facts themselves without the ability to think and speak correctly about them, are of but small advantage in mental training. Throughout the whole course of a child's school career, most of the subjects of study are quite beyond his intelligent grasp, unless he is specially precocious. He then described, at some length, the influence which close confinement in school-rooms had upon the health by inducing a tendency to frequent bronchial catarrhs, which in children of phthisical history will ultimately lead to that disease, and quoted several cases from his own experience in support of this. He also spoke strongly in favor of the half-day system of schooling. In our elementary schools it is not so much actual overwork as excessive stimulation of the growing brain, which leads to its far too rapid growth to remain healthy.

Such was Dr. Howie's argument; and although

we think that in his enthusiasm he carried his recommendations too far, on the other hand we hold that he was arguing on the right side. The anxiety that many parents and teachers have to push very young children to the utmost of their powers, is almost certain to sacrifice the very object at which they aim. The precocious little boy or girl usually turns out to be the stupid, inactive man. Education in young children must be at the same time amusement, or it is valueless and probably harmful. A repulsive task should never be set for a child. Hence the great superiority of the methods of Pestalozzi and Froebel.

PREJUDICE AGAINST MEDICAL MEN.

It is somewhat remarkable that even in the most intelligent circles in England there is a distrust of medical men. This is seen in the frequent suits at law which are instituted against even eminent members of our profession, and by the tone of some of the ablest newspapers. In our last mail, for instance, we note a suit against the distinguished alienist, Dr. Forbes Winslow, and another against a Birmingham physician of high standing.

The plaintiffs in both cases lost, but the unpleasant notoriety and expense of defending themselves remained with the physicians. In fact, recently Sir Andrew Clark, M. D., has protested against this outrageous prejudice.

Its presence is also shown in a letter admitted to one of the most important London papers, *The Standard*. This letter, purporting to be from "A Young Wife," accuses medical men of intruding on the confidences which ought to exist between husband and wife alone, and consistently ends with the suggestion that women should be attended only by women doctors.

The charge which "A Young Wife" prefers is, it does not need to be said, unfounded; nor that medical men, as often as they can without injury to their patients, purposely avoid discussion of details that might seem unbecoming to "Young Wife." When, however, safety to life and health demand that the medical attendant must obtain in-

formation which he can only get by means of questions that would come more appropriately from a husband, then stern duty commands the proceeding; but to call this an unjustifiable intrusion on the marital relations, is as cruel as it is ridiculous.

All such prejudice arises from ignorance, and will disappear by a more general cultivation of the masses in anatomy and physiology.

SUBJECTS FOR THE AMERICAN MEDICAL ASSOCIATION.

Of the subjects which urgently demand the serious attention of the American Medical Association, we name as paramount those which are tending to the degradation of the profession in this country. It ought to act solidly and with determination where these are concerned.

One of these is the *debasing of medical education* by certain Western colleges, and by the efforts of some State Legislatures, to make it part of a free course. Such colleges as offer improper inducements to students, or who pass them on incomplete courses, or who furnish diplomas to manifestly unprepared students, should be publicly branded and their names pilloried.

Another subject for immediate attention is the studied contempt cast upon the profession by some transatlantic steamship lines, especially the Red Star Line, which has put surgeons in the second cabin. The other lines have not yet gone so far, but undoubtedly will soon follow suit if the American profession accepts in silence this insult.

The Red Star Line is owned in this country, and its surgeons are American physicians, although it sails under the Belgian flag.

We say, here are two points calling for immediate action. They should be approached with energetic measures. The colleges should be pilloried, and a demand made upon the steamship lines to restore the surgeons to their proper sphere, or the association would recommend all its members and all the profession to throw their influence against its business. Such corporations have only one vulnerable point, only one heel of Achilles, and that is their pockets. Respect for the feelings of educated men is utterly unknown to them.

HOW TO READ PAPERS BEFORE MEDICAL SOCIETIES.

Since the season of medical society meetings is fast approaching, a few words on this subject will be timely. In looking over the various papers that are annually read at the different State Societies, one is forcibly struck with many unfortunate features about them. Oftentimes there is little or nothing new in them, their titles are frequently irrelevant, and they are altogether unnecessarily lengthy. When a man has something really new and valuable that has occurred in his experience, the like of which has never been put upon record, or of such a nature that, even though recorded before, an accumulation of similar records would seem desirable, then by all means he should either publish his experience in a medical journal, or present it in the form of a paper before his State Society; but, to repeat, let him have some definite end in view, let him be positively sure that his paper will bring enlightenment to the profession. When he has settled this point, he should fulfil his purpose in as few words as possible. It is both tiresome (to his auditors) and unprofitable, to read long published extracts bearing on the subject in hand; for by simply referring to where such matter may be found, all those who so desire can read it for themselves, while those who are already familiar with the writings quoted from, will not be annoyed by uninteresting repetition. In a word, then, be sure you have something new, say it in as few words as possible, avoid long quotations, and give your paper a relevant title.

NOTES AND COMMENTS.

Gallic Acid in Hemorrhage from Urinary Organs.

Of all the remedies usually recommended for this condition, Dr. Lionel S. Beale (*Lancet*, March 15), prefers gallic acid, which he says seldom disagrees in any way. Some patients complain of its taste, but it is generally well borne by the stomach. It does not cause constipation, and even when the crystals are swallowed in a state of suspension in water or mucilage no inconvenience results, and the stomach is not disturbed by their presence. The glycerine of gallic acid is, how-

ever, the most pleasant form in which to prescribe the remedy. This contains one part of gallic acid in four. Forty minims will contain ten grains, and may be given in distilled water, peppermint, orange, or other water. But it is most essential that the patient should persist in taking the doses regularly for several days. Gallic acid is absorbed by the blood and passes away unchanged in the urine, and it is probable that it acts directly on the parts from which the bleeding is taking place; and therefore a certain strength of solution is necessary to get the good effects, and this can only be obtained by its persistent introduction into the stomach, and so into the blood at short intervals of time. He has given gallic acid in ten-grain doses every three hours without intermission for three weeks, no objection having been made on the patient's part. Whether much larger doses would be absorbed he doubts; but he is not aware to what extent the remedy may be pushed, nor does he know in what respect very large doses would be deleterious. On these points he would be glad to learn the experience of other practitioners who have largely employed the remedy. He has generally found that the desired effect has resulted after ten-grain doses had been kept up for three or four days, and in cases where the bleeding did not actually cease, it was certainly well under control. In several of those painful cases of hemorrhage from fungous growth, the bleeding was much lessened and the fatal result postponed; in some of his cases he should say that death was due rather to exhaustion and weakening of the general health than to the hemorrhage. He therefore commends this remedy in the cases of hemorrhage to which he has referred, and he prescribes it with confidence, so that its use may be steadily continued until its beneficial action is clearly established.

Rupture of Ligamentum Patellæ and Fracture of Patella.

The co-occurrence of these two injuries is sufficiently rare to render interesting the case which Dr. M. Gardiner reports in the *Edinburgh Medical Journal*, March, 1884:

The patient was a heavy, powerful man, who while at work tripped over a bag and fell heavily on his knee on the floor. While falling he had tried to recover himself by a backward jerk, but had failed to do so. Trying to rise, he found he was not able, and when set on his legs he could neither walk nor stand without assistance.

On examination, a large, tolerably definite swelling was seen over the knee-cap. Touch

proved this to be fluid. The movements of the joint were limited, extension being almost abolished. Fluctuation was also to be felt on each side of the ligamentum patellæ, but the attachment of that structure could not be defined, and the finger felt as if it could pass right in between tibia and femur. Rupture of the ligament was therefore diagnosed. Owing to the history, attention was next directed to the patella itself, patient stating that he thought it was broken. On account of the swelling the patella could scarcely be defined, and owing to the rupture of the ligament its superficial area did not seem increased. Fracture was, therefore, only suspected, but not absolutely diagnosed.

The swelling of the knee and surrounding tissues increased, but finally subsided under the treatment adopted, and on the fourth day the joint had so far returned to its normal state as to allow of a thorough and perfect examination. This proved the suspected fracture to be real.

It is difficult at first sight to account for both rupture and fracture, but the probability is that the backward jerk described by patient ruptured the ligamentum, and that the blow on the floor fractured the patella. Effusion was very rapid and very extensive, seen principally over the patella and on both sides of the head of the tibia. Hot fomentations applied at first did not seem to answer well, but the application of dry cold proved of great service in reducing both swelling and pain. The case is doing well.

Uterine Displacements and their Treatment.

Pessaries are always suggested to the mind when a displacement of the uterus is made out, yet we all know that they are oftentimes not only inefficient, but in some cases are absolutely injurious. On this subject Dr. Robert Bell, writing in the *Edinburgh Med. Jour.*, March, 1884, says: "There are certain conditions of the uterus where the introduction of a pessary would produce much more pain and a more serious array of symptoms than the malposition, if left alone, would tend to do; and it is in such circumstances that the tampon, in my experience, has proved of such eminent service. We are all familiar with the great power glycerine exerts in abstracting fluid from an oedematous tissue; but it may not be equally well known that this power is very much enhanced when the glycerine contains alum in solution. Moreover, the presence of alum, by virtue of its astringent properties, gives tone to the vaginal wall and the uterine wall and supports. The tampon, therefore, when saturated with a solution

of this salt in glycerine, and properly applied in flexions or versions, acts in three different and beneficial ways—1st, as a support; 2d, as a depleting agent; and 3d, as an invigorating agent to the uterus and vagina."

He states that the tampon varies in size with that of the vagina, and that it is as well to attach a piece of fine cord to it to make its withdrawal easy of accomplishment. The proportion of alum to glycerine is one in eight, and to every eighty ounces an ounce of boracic acid is added to keep the tampon from becoming foetid, which it otherwise would do if the discharge from the uterus is at all copious. The tampon itself is composed of carded cotton. He would therefore recommend this method of treatment in cases where the use of the pessary is inadmissible.

Multiple Hepatic Abscesses in a Boy Aged Eleven.

To the Clinical Society of London (March 14, 1884), Dr. Samuel West read notes of this case: A Jewish lad, aged 11, who had never lived out of London, had a rigor on January 21, and pain in the right hypochondrium. He was brought to a hospital on February 20, with evident hepatic abscess, extremely ill, and with a temperature of 105°. On February 23, a large abscess was aspirated, and thirteen ounces of greenish sweet pus were removed. Four days later a free incision was made, and seven ounces and a half of turbid purulent fluid escaped; a second abscess was discovered and aspirated, when one ounce of blood-stained pus was removed. On March 6, the two last swellings were again prominent, and were freely laid open, and a drainage-tube inserted. On April 9, a fresh abscess was found, explored, and freely laid open. From this time convalescence commenced, interrupted only by a diffuse abscess in the abdominal walls, which healed alone on being opened and washed out. The points of the case were the following:

1. The age, 11 years.
2. The number of abscesses, three or four, and probably more.
3. The absence of any assignable cause.
4. The great relief by evacuation.
5. The rapid fattening during convalescence.

Cuvier's Brain and Cranium.

From the *Rev. de Therap.*, December 1, 1883, we learn that in a recent communication to the Société d'Anthropologie, Dr. Georges Hervé quoted some details from a report on the illness and autopsy of Cuvier, which was addressed to the So-

ciété de Médecine Pratique by Emmanuel Rousseau, and inserted in the *Lancette Française* for May 26, 1882. According to this report, the weight of the encephalon was found to be 3 pounds 11 ounces and 4 drachms, or 1861.20 grammes; while the official *procès-verbal* of the autopsy, signed by A. Bérard, fixes it at 1882.96 grammes. The cerebellum weighed 191.40 grammes. The dimensions of the cranium were taken prior to the autopsy, and are as follow (the hair having been previously shaved off):

1. The great horizontal circumference 65.45 centimetres.
2. The median inco-frontal curve, 36.69 centimetres.
3. The transverse supra-auricular curve 40.60 centimetres.

The examination of the brain revealed, besides a truly extraordinary abundance of the cortical substance, a great amplitude of the lateral ventricles, which contained a small quantity of slightly turbid fluid, their walls seeming of a mucous nature. This fact, joined to the enormous dimensions of the cephalic extremity, and the thinness of the walls of the cranium, would lead to the supposition that Cuvier had been—as indeed it was stated that he had—the subject of hydrocephalus in his childhood.

Miliary Aneurisms of the Stomach.

The causes of fatal hematemesis (says a foreign exchange) are fairly well known, but some of the details of its pathology still require elucidation. M. Gallard has recently written on the subject of miliary aneurisms of the stomach. In 1875 he made some observations on simple gastric ulcer, and as a rule found sufficient anatomical cause for death where that had ensued. But in 1876 he came across two cases in which rapid death from hemorrhage had occurred without any other lesion being found than ulceration of a miliary aneurism situated on one of the branches of the gastric coronary artery. He has recently discovered a third instance in a man aged forty-eight years who died suddenly from hematemesis. The mucous membrane of the stomach showed at the great curvature and near to the cardiac orifice a small ovate tumor, the size of a haricot bean. There seemed to be no doubt that this was an aneurism which had ulcerated at its summit. Goupil, in his thesis on the "Generalization of Aneurisms," quotes two cases of miliary aneurism of the stomach in old people, which, however, had not led to any symptoms. Dr. Douglas Powell has published a case in the *Transactions of*

the Pathological Society for 1878, which occurred in a patient the subject of phthisis.

Contagiousness of Typhoid Fever.

Apropos of this interesting question, Dr. J. W. Long thus writes in the *Nashville Jour. Med. and Surg.*, February, 1884:

This disease is generally conceded to be *slightly* contagious—i. e., the specific poison having its abode in the alimentary canal, is carried off in the fecal matter, and after leaving the body goes through a process of development, which fits it for contaminating other persons—through the medium of the air, water, milk, etc. Some of the feces almost always soiling the patient's linen, makes the washer-woman more liable to take the disease than any one else. This then, is not strictly a *contagious* disease—but more properly belongs to Prof. Maddin's class of *contagio-miasmatic*.

Statistics of 35 cases occurring in private practice—showing mainly the tendency to plurality of cases in a family:

No. families.	No. cases in each.	Fatality....	Causes of death.
1	5	2	Sudden failure of heart in 1.
1	4	1	Gradual failure of vitality in 4.
3	3	3	<i>Perforation</i> , or tumor or abdomen bursting internally in 1.
3	2		
12	1		

I cannot say positively, whether or not the 2d, 3d, 4th, or 5th case, occurring in the same family, was produced from the 1st, and so on in succession; but this I do know, that the time between the occurrence of any two cases (in the same family) was from "one to four weeks"—being Dr. Bartholow's estimate of time necessary for fever to develop after system is infected by the specific poison.

A Case of Athetosis.

A case of this rare nervous disease, first defined, we believe, by Dr. Wm. A. Hammond, was described recently by Dr. Dyson, of Sheffield, England. It is characterized by inability to maintain a fixed position. The case in question was one of the right arm, and in a much less degree, of the right leg. The patient, a girl aged eleven years, had scarlet fever three months ago. About six weeks ago, she was seized with an apoplectic form of attack, in which there was loss of consciousness, paralysis of right side of the face, right side of the tongue, right arm, and right leg. She was

confined to bed for a fortnight, and as the paralysis passed off, the present condition of the right arm gradually supervened. Sensation is but slightly affected. The movements are slow and deliberate, and intensified by exertion, and are exactly those described in typical cases of *athetosis*. There was no history of rheumatism. The heart is healthy. The urine presents no abnormal conditions. In this case there is a history of the girl having been bullied by the school board attendance officers to return to school too soon after the attack of scarlet fever.

Uses of Copper Sulphate.

The value of this article in gynecological practice has lately been urged before the Paris Académie de Médecine by M. Charpentier. He read a paper on "Sulphate of Copper in Obstetrics," and deduced the following conclusions:

1. Sulphate of copper is an antiseptic of the first order, and renders signal service to obstetricians.
2. It is cheap, and easily used by the most inexperienced hands.
3. Of complete innocuity whether employed under the form of intra-vaginal injection, or intra-uterine.
4. That sulphate of copper, from its astringent properties, could advantageously replace perchloride of iron.
5. The solution employed should be a one per cent.
6. The solution at this strength might be continued eight or ten days without producing more than a diminution of temperature, and a fall in the pulse.

Eczema Capitis.

From the *Edinburgh Med. Jour.* we learn that in the ordinary eczema of the head in children, so commonly met with in dispensary practice, after two or three thorough cleansings, the daily application of the following salve nearly always suffices to obtain a rapid and lasting cure:

R. Acid. salicylic, gr. x.
Tinct. benz., ℥. xx.
Vaselin, ʒj.
M. Ft. ung.

On other parts where a soft, easily melting salve such as this is not suitable, or where a firm dressing or a drying effect is desired, the following paste should be rubbed on:

R. Acid. salicylic, gr. xix.
Vaselin, ʒj.
Zinci oxid, Amyli, ʒj.
M. Leniter terens, fiat pasta. aa ʒ ss.

Peripheric Neuro-Tabes.

In the *Brit. Med. Jour.*, March 22, 1884, we read that at a meeting of the Société de Biologie, held in February, 1882, Dr. Déjerine made a communication on some lesions of the peripheric nerves found in locomotor ataxy. He said that some of the symptoms, such as the occurrence of localized areas of anæsthesia and hyperæsthesia, were due to a peripheric neuritis, and not to a degeneration of the posterior nerve-roots, or of the spinal cord. More recently the same author has attempted to prove, at a meeting of the Académie des Sciences, that all the symptoms of tabes can be present without myelitis. In two cases where the diagnosis had been made without hesitation, he found after death that the nerve-roots and spinal cord were quite healthy, but that many peripheric nerves presented evident signs of parenchymatous neuritis.

Severe Conjunctivitis from Whisky Thrown into the Eyes.

In the *Brit. Med. Jour.*, March 22, 1884, Mr. G. A. Brown communicates this case. The patient was seen the day after a glass of neat whisky had been thrown in his eyes. Both eyes were closed, the lids were much swollen, with yellowish sanious semi-purulent discharge. The lower half of each cornea was covered with a diphtheritic membrane, which peeled off, leaving the cornea clear. The conjunctivæ were deeply injected, and there were slight ecchymoses, but no chemosis. There was much pain and intolerance of light. Under belladonna fomentations, and syringing with a warm weak solution of boracic acid, improvement rapidly took place. In two days the membrane had disappeared, and the conjunctivitis and photophobia soon subsided, so that the man was well in a fortnight.

To Destroy the Nerve of a Tooth.

From an exchange we learn that the preparation used by dentists to destroy the nerve of a tooth is the following paste, which is usually made in minute portions as wanted:

Arsenious acid,	3 parts.
Morphia sulphate,	2 parts.

Creasote—a sufficient quantity to make a paste.

When used, a minute quantity is introduced in the tooth cavity, which has been previously dried with absorbent cotton, and afterward a small plug of cotton moistened with collodion is placed over it.

CORRESPONDENCE.

Will-Power in Child-Birth.

EDS. MED. AND SURGICAL REPORTER:

February 29, 6 a. m. I was summoned to Mrs. M—, a primipara, aged twenty-four years, of German parentage, short, robust, healthy-looking. I found the patient sitting on the side of the bed. When I inquired what they wanted with me, the nurse said that when the messenger started for me she was having real hard pains, but upon my arrival, and before I entered the house, they stopped. I remained about an hour and a half, and still she said she had no pains, although I noticed an occasional frown indicative of slight pains. I administered $\frac{1}{4}$ grain morphia sulph., and returned to my office (about three miles distance), with instructions to send for me immediately on the appearance of labor pains. At 8.30 p. m. a messenger came and said that they wanted me to come quickly. Upon entering the house, the nurse told me that the waters had broken about 7 o'clock. She was having considerable pains, and upon examination, I found the os uteri dilated to the size of a silver half-dollar, and yielding, the fœtus not yet having entered the superior strait. After about an hour's apparent labor pains, I made another examination, and to my surprise, found that labor had not progressed a particle. I remained all night, and during that time made four or five examinations; and at 7 o'clock a. m., twelve hours after the water had broken, no progress had yet been made in labor—the os remaining about the same, the pains were short and frequent, but at regular intervals. She was up and down frequently, with a disposition to avoid any position that would make the pains worse; and as I have always allowed my patients the greatest possible latitude, not restraining them till the very last moments of labor in a majority of cases, I did not think it necessary to depart from the rule in this case.

In the morning I returned to my office for about two hours and a half, and on my return found no change; and she remained about the same throughout the day, at times complaining a good deal of her back.

Notwithstanding the administration of several large doses of quinia, and afterward the fl. ext. of ergot, entreaties and encouragement, no apparent progress was made until about 7 o'clock p. m., March 1, when she became more restless, but persisting in having her own way; and as my stock of patience was about exhausted, I spoke a little harshly to her, and told her that she must resume the recumbent position, and try and help herself a little, or she would kill herself and the child also. She asked two or three times to be allowed to get up, as she could not stand it that way; but I had taken my stand, and was determined to maintain it for a while at least. And the nurse seeing that I had broken the ice, as it were, proceeded to chastise her, and give her a piece of her mind; and, as if by magic, the pains began to get stronger and more like labor pains, the os gradually to dilate, and in a few minutes the vertex had fairly entered the superior strait, and in one hour and fifteen minutes

labor was completed, giving birth to a male child weighing about nine pounds. The after-birth came away without any trouble in a few minutes, and she convalesced without an unfavorable symptom, and remarked afterwards that it was not so bad as she thought it would be.

I am not prepared to say how much longer this woman could have held control of her delivery, but I am led to believe that it would have been many hours, had I not been a little harsh, and brought her to realize the danger that she was liable to bring upon herself.

I notice the report of a similar case in the Peoria (Ills.) *Medical Monthly*, by J. B. Ebert.

In a practice of 25 years I have not met with a similar case, and was not a believer in such a decided will-power over labor as was manifested in this, and therefore am prompted to report this case.

To sum up: With apparent hard labor pains for twenty-four hours, the os uteri dilated to the size of a silver half dollar, and larger at times, the head presenting loosely in the superior strait, the patient restless and uneasy, apparently trying to avoid the pains, and after being scolded and made to understand her peril, labor was begun and terminated so speedily and so satisfactorily. If it was not will power, what was it that retarded labor?

And just here I would like to ask a question: Do quinia and ergot promote uterine contractions in labor? or are they (the uterine contractions) the natural results of the completion of uterine gestation? No doubt many will think this a very foolish question; but having administered both drugs a great many times with apparently satisfactory results, I have at other times administered them without any more effect in that direction than if I had given so much water or flour, as they did in this case. Sometimes I am inclined to think there is not as much potency in them as they are given credit for.

J. CHEWNING, M. D.

Renault, Ills., April 18, 1884.

Ocean Grove and Asbury Park.

EDS. MED. AND SURG. REPORTER:—

With your permission I would like to call the attention of the profession to the advantages of Ocean Grove and Asbury Park. As a health resort, winter and summer, Asbury Park is a city of country homes by the sea, in the midst of a forest of pine and oak. Its long avenues, beautiful lakes, well laid out public squares; its business streets; its churches of every denomination; its schools; its sources of entertainment, where art and science join hands to please—all that the most fastidious could desire in the way of social life, is at command. In summer, undisturbed by rowdies or mosquitoes, the cool sea breezes make glad the heart; in winter, the climate, moderated by the same breeze, tempered by the waters of the Gulf Stream, and protected by the hills and forests in the rear, and a dry sandy country, leaves nothing to be desired, except it be the special security and Christian privileges of Ocean Grove, separated by a small lake from the Park here. In the Grove, strange to say, time seems a perpetual Sabbath, while the

Sabbath itself is like a long-continued psalm; scarce a sound, save the melody of praise and thanksgiving. The people live together in fellowship, and every man's neighbor is his brother. So carefully is it guarded, that even the latch-string is left hanging out at night in many of the sleeping homes. Here, too, the pines make fragrant the air; here flows the fountain from the artesian well, supplying the city with pure water. Its system of sewerage, said to be unequalled by any city along the coast, casts its refuse four hundred feet out into the sea, beyond low water mark.

The grand auditorium affords opportunity for daily varied exercises, re-unions and representations, and almost all Christian societies avail themselves of the peculiar advantages of the Grove. Representative men and women of the nation here may be seen, heard, and studied. It is indeed the place *par excellence* for literary men and worn-out brain workers to recuperate. The bathing is unsurpassed in Grove and Park, while the walks and drives leave nothing to be desired. The accommodations offered for guests, sick or well, are ample, with terms to suit all purses. Prominent among these as winter homes, is the Sheldon House, open summer and winter—spacious and well-appointed, especially adapted to meet the wants of the invalid, steam heat, gas, hot salt water baths, sources of amusement for indoor days—I might say, "perfect in all its parts"—central in the grove and convenient to the park, facing the beautiful Wesley Lake, and fronting the beach. Also, especially to be noted is the Atlantic House, wanting nothing to make comfortable its guests. Especially attractive in its management—so say my patients. While in summer, the elegance and luxury of hotels and homes fully meet every possible expectation.

My patients, visiting the Grove or Park, when troubled with either catarrhal or certain forms of lung troubles, as well as many disordered conditions, usually report marked improvement after a sojourn in the Grove. A visit in midsummer or midwinter would amply repay time and trouble of even a medical man. D. M. BARR, M. D.

1902 Spring Garden, Philadelphia.

Treatment Wanted for a Case of Dipsomania.

EDS. MED. AND SURG. REPORTER:—

I should be very thankful for suggestions from yourself and as many of your readers as may be pleased to give their experience, for the treatment of a case of dipsomania in an individual about 40 years of age. It is paroxysmal; a period of from two weeks to one month intervening between the attacks. He is a man of considerable intelligence; kindly disposed in his family; not quarrelsome or noisy when drinking, but when he gets as full as is compatible with locomotion, goes straight home, and to bed, where he remains until the influence of the liquor begins to pass off, when he returns to the saloon, and the process is repeated. He remains drunk from one to three weeks, during which time he is very careless of his personal appearance; but as soon as he begins "sobering off," puts on clean linen, dons a good suit, polishes his shoes, and is very painstaking about his toilet. He is also very confident that he will never drink again. My treatment has always

been confined to the attack, and consisted principally of sedatives (chloral, pot. brom., etc.) but I would like to try some plan of treatment in the intervals.

There are the usual premonitions of an attack, recognized by each member of his family.

M. F. A.

Metamora, Ind., April 9, 1884.

Conception without Intromission.

EDS. MED. AND SURG. REPORTER:—

An article in the MEDICAL AND SURGICAL REPORTER of April 12th, entitled "A Case of Conception without Intromission," reminds me of a somewhat similar case that came under my own observation in 1870. I was called to see a young lady, nineteen years of age, who was supposed to have an ovarian tumor. I found her lying upon a sofa, and placing my hand upon her abdomen, proceeded to make the usual inquiries. In a few moments I felt the movements of a vigorous child. The patient asked: "Doctor, what is that? I have felt it for some time, and it grows stronger." I replied, "If you were a married woman I should unhesitatingly say it was a child." She said, "That is absolutely impossible." Upon further examination, I found an unruptured hymen completely closing the vagina, except an opening at its lower border not larger than a very small crow quill. I asked to see the "young man" in the case. He assured me he had never had connection with her, a statement I could very well believe; but he had been allowed to place his penis against the vulva, and emission had taken place while the organ was there. One month after, I delivered her of a healthy child. There could be no mistake about this—conception *had* taken place without intromission.

Newark, N. J.

WM. A. SMITH, M. D.

A New Treatment for Tape-worm.

EDS. MED. AND SURG. REPORTER:—

I have had within the last three years several cases of tape-worm to treat, and finding such strong objection to the large draught of medicines in ordinary use, I prescribed the following:

R. Chloroform.

Ex. male fern,

āā f. ʒj.

Emul ol. ricini (50 per cent.), f. ʒij.

M. Sig.—All to be taken at once after twenty-four hours' fast.

In every case the medicine was well borne, and the worm expelled entire. In two cases I omitted the male fern, and the result was the same as when the latter drug was in combination.

My object in reporting this treatment is to induce others of the profession to try the chloroform and report results.

I claim for this agent a specific and rational action as an adjuvant in the expulsion of the worm. It anesthetizes or suspends vitality, and any active purge during anesthesia of the tania is all that is requisite to expel it.

I earnestly ask those who have cases to try the chloroform, or chloroform and male fern, as above prescribed, and report results.

Puducuh, Ky.

J. G. BROOKS, M. D.

NEWS AND MISCELLANY.

Report of the Elk County Medical Society.

(Specially reported by Dr. SPENCER M. FREE.)

Fifth regular meeting for 1883-4.

After the usual exercises common to all societies, the essayist, Dr. Straitt, discussed the subject of "Medical Ethics." As this subject has been made a special order for our next meeting, no further mention of it will be made here.

There were two items of interest introduced under miscellaneous business, as well to the profession at large, as to our society. The first was a resolution instructing our delegates to the State Society to present to that body a request that a memorial be presented to Congress praying the publication of another edition of the *Medical and Surgical History of the War of the Rebellion*, and that its distribution be so arranged that physicians will be able to secure it. The majority of the society favored a gratuitous distribution; others that it be sold to the profession at the mere cost of publication.

The second matter of general interest, probably not beyond the limits of this State, was the appeal in behalf of Dr. Forbes, of Philadelphia, who incurred such loss, professionally and financially, in the lawsuit familiar to all the profession. Dr. Free proposed to the Society a series of resolutions, embracing, first, a contribution from our Society to our unfortunate brother; second, a censure upon the Jefferson Medical College for its indifference in the matter and its dishonorable treatment of Dr. Forbes; third, a request to all the county societies of the State to join us in the first two parts of the resolutions.

After an animated discussion, the motion for adoption of the resolutions was lost by a majority of one. A motion was then unanimously carried to send the contribution, accompanied only by the sympathies of the Society.

A rather unique case was presented to the society by Dr. Waid. A female, healthy, middle-aged, and married, has an attack of stomatitis at each menstrual period. Treatment is of no value. It recovers rapidly of itself when menstruation ceases.

Dr. Williams reported a case of severe pain along the course of the tibia. Has been of four months' duration. At the menstrual periods she is perfectly free from pain at this point, but it recurs on cessation of the menses. Curative treatment has been of little value. It is relieved temporarily by anodynes.

The subject of diabetes mellitus in children was discussed. It is the opinion of the majority, and, I should add, their experience also, that it is a very rare disease in childhood. One member in a practice of nearly twenty years had not met with a case. This corroborates the statements of our standard text-books on the subject.

No more cases of particular interest to the profession at large were presented.

Dr. Koch's Method of Examining Excreta.

The *Indian Medical Gazette* reports that on January 16, 1884, Dr. Koch, accompanied by Dr. Fischer and Dr. Gaffky, attended the *conversazione*

of the Calcutta Medical Society, and Dr. Fischer gave a demonstration of the methods employed by the German Cholera Commission. The culture-material used consisted of gelatine, meat-juice, and peptone. Water was examined by shaking a small quantity up with some of this prepared gelatine liquefied by heat; the mixture was then poured on to a sterilized glass plate and covered from the air. Separate spots appeared on the glass plate, due to the growth of micro-organisms; each spot was a separate colony, the germs having been distributed throughout the gelatine by the shaking. To the naked eye these spots or colonies differed among themselves. The unfiltered water of the Hooghly, and the filtered water supplied in the hydrants, produced results by this method differing very widely in degree; the hundredth part of a drop of water from the Hooghly produced a greater variety and number of colonies than ten drops of the hydrant water. In examining excreta, a small quantity was added to the liquefied gelatine in a tube, shaken, and poured out on a plate. Many different colonies grew and could be examined by the microscope, or used for inoculating fresh tubes so as to obtain pure cultivations. The stools of cholera, dysentery, diarrhœa, had thus been examined. One particular bacillus had been found regularly in the wall of the intestines and in their contents, in cases of cholera, but not in any one of the numerous other diseases examined. This bacillus, when growing in a colony on gelatine, was, of a white color in mass, and caused liquefaction of the gelatine.

Pennsylvania State Medical Society.

The thirty-fifth annual meeting of the Medical Society of the State of Pennsylvania will be held in the annex to the Union League (Broad and Sansom streets), Philadelphia, May 14, 15, and 16. The sessions will last from 10 a. m. to 5 p. m., with intermission from 1 to 2 p. m. A large number of very interesting addresses are promised, and the social entertainments are of such a nature as to insure a very pleasant meeting.

Location and rates of hotels near the place of meeting:

Saint George Hotel, Broad and Walnut streets, \$3.00 per day.

Aldine Hotel, Chestnut street, above 19th street, \$3.50 to \$4.50 per day.

Continental Hotel, S. E. cor. Chestnut and 9th streets, \$2.50 to \$4.00 per day.

Lafayette Hotel, Broad street, below Chestnut street, \$3.00 and upward per day.

The Bellevue, N. W. cor. Broad and Walnut streets, \$3.50 per day.

Girard House, N. E. cor. Chestnut and 9th streets, \$3.50 per day.

Colonnade Hotel, S. W. cor. Chestnut and 15th streets, \$3.50 per day.

West End Hotel, Chestnut street, above 15th street, \$2.50; rooms without board, \$1.00 per day.

Bingham House, S. E. cor. 11th and Market streets, \$2.50 per day.

Smedley House, Filbert street, below 13th street, \$1.50 to \$2.00 per day.

Great Western Hotel, Market street, above 13th street, \$2.00 per day.

[N. B.—Members and delegates should mention their connection with the Society when applying for accommodation, as some of the prices mentioned above are special rates given to the Committee of Arrangements.]

Italy at the International Health Exhibition.

The *Opinione*, in mentioning that His Majesty the King of Italy lately received Mr. Ernest Hart, of London, a member of the Executive Council of the International Health Exposition of London, and Mr. H. E. Acton, in 'special audience, adds: "The King received with interest particulars of the programme of the Exhibition, and entered at length into the details of the part which it was desired that Italy might take. His majesty referred to the measures in progress for accentuating the sanitary movement in Rome, the Campagna, Naples, Milan, and other parts of Italy; and desired that it might be publicly known that he felt a lively interest in the Exhibition, and a desire that Italy should be adequately represented." We learn by private letters that the Minister of the Interior has communicated to Mr. Hart a copy of a circular letter which he has addressed to the provincial prefects of Italy, desiring their active aid in the matter, and that the Minister of Commerce has addressed a like official request to the local chambers. The city of Rome has named a special commission to prepare for exhibition a series of models and plans of archaeological as well as of modern interest, illustrating the aqueducts, thermæ, columbaria, etc., and has voted a sum of money for the purpose. The food-products of Italy will be illustrated by private firms, and a large collection of the wines of North and South Italy will be shown.

Florida Medical Association.

JACKSONVILLE, FLA., April 3, 1884.

The Florida State Medical Association will hold its annual meeting in the city of Jacksonville, on Wednesday, June 4, 1884, at 12 m.

County medical societies are invited to send delegates, and all physicians who are graduates from regular schools of medicine are cordially invited to be present.

Essays are promised by the following physicians:

Dr. R. B. S. Hargis: "Malaria and the Relations of Micro-Organisms to Disease."

Dr. R. P. Daniel: "The Tongue in Disease, and its Diagnostic Value."

Dr. C. J. Kenworthy: "Phthisis Pulmonalis."

Essays expected from other prominent physicians.

T. M. Palmer, M. D., orator.

Efforts will be made by the Committee of Arrangements to obtain half-rate tickets on railroad and steamboat lines for delegates to the Association.

E. T. SABAL, M. D., President.

Attest: A. W. KNIGHT, M. D., Secretary.

What He Knew about Digestion.

In the *Brit. Med. Jour.*, we read that a candidate at a recent examination for a scholarship under the school board is reported to have made the following statement concerning the process of digestion: "The food passes through the liver,

and evaporates by means of little holes called capillaries." The examiner who published the answers suggests that this novel theory had its origin in the study of some cheap diagram of the digestive system. Knowledge of this kind is indeed a dangerous thing, and worse than conscious ignorance. There is a simple ignorance and there is a compound ignorance—that is, there are people who are ignorant and know that they are, and there are people who are ignorant and think they know. The latter only are a dangerous class.

Small-pox in India.

The epidemic of small-pox which has been prevalent in Madras since the beginning of the year, would seem to have assumed very serious proportions. About twelve hundred deaths from this cause occurred in the town of Madras during the first two months of the year, and telegraphic dispatches state that the epidemic is still raging in the town. In spite of some quarantine precautions, chiefly the careful inspection of all persons entering Bangalore from Madras by train, and the watching of the main road between the two towns, small-pox has appeared at Bangalore. The latter town is an important military centre. Vaccination with calf-lymph is being extensively performed.

The Judge and the Consumptive.

"Stop that coughing over there!" cried a New York judge. "Such coughing disturbs the business of the court."

There was a short, painful silence, writes Eli Perkins, during which a pale, consumptive man struggled with himself, then coughed again, and continued it for several minutes.

"I'm bound to stop that coughing!" exclaimed the judge. "I'll fine you \$10. I think that will stop it."

"Jedge," said the cadaverous man, "I'd be willin' to pay \$20 to have that cough stopped. If you can stop it for \$10, you'd better get down off that bench and go to practicing medicine. There's money in it, jedge—money in it!"

Cremation in Italy.

The Minister of the Interior in Italy, after consultation with the Sanitary Council, has decided on the following rules with respect to the cremation of human bodies and the societies formed for that purpose:

1. The societies will be considered responsible corporations as soon as their economical conditions give sufficient guarantee for their permanent existence.

2. The cremation of human bodies will be subordinate to a permit from the political authorities, to obtain which the consent of the family of the deceased must be produced.

The Adulteration of Drugs in Massachusetts.

A remonstrance has been laid before the Massachusetts Legislature against any change in the present law relating to the adulteration of drugs. It is signed by Dr Alfred Hosmer, the president of the Massachusetts Medical Society, Dr. George C.

Shattuck, Dr. George H. Lyman, Dr. Benjamin E. Coting, and Dr. Henry W. Williams. The document urges that the United States Pharmacopœia should be the only standard of the strength and purity of drugs.

The Surgical Pantograph.

At a meeting of the French Association for the Advancement of Science, held at Rouen, M. Mallez presented an instrument of precision called a surgical pantograph, for measuring the dimensions of the enlarged prostate, and for demonstrating by the aid of graphic tracings the influence of treatment on the diseased organ.

Items.

—There are said to be twelve medical journals published in Japan.

—Dr. Kassowitz (*Central für Chir.*, January 26, 1884,) recommends phosphorus in cod-liver oil for rickets.

—Among the candidates for the *externat* of the Paris hospitals, Mlle. Mathieu, a negress, has competed with success.

—The isolation of consumptive soldiers, according to the "*Progrès Médical*," has been decreed in the military department of Prussia.

—The Free Hospital for Women of Boston, Mass., has recently received a gift of \$35,000 from the wife of Lieutenant-Governor Oliver Ames.

—The Boston Board of Health has appointed Mr. George W. Forrestall superintendent of health, Dr. John H. McCullum city physician, and Dr. Arthur C. Griffin port physician.

—The bill prohibiting the manufacture and sale of oleomargarine within the limits of the State of New York has passed the Senate, with an amendment reducing the penalty to between \$100 and \$500.

—Mr. Erastus Brooks, of Richmond county, Dr. J. A. Delavan, of Albany county, and Mr. George W. Cooke, of Ulster county, have been appointed members of the New York State Board of Health.

—A newspaper report from Camden, N. J., states that scarlet fever has been spread in Gloucester City by children having eaten ice which had been used by an undertaker on the body of a person dead of the disease.

—"Rye and Rock" confectionery, as was confessed by the makers on the occasion of a hearing before Health Commissioner Raymond, of Brooklyn, recently, is flavored with an extract, and mention was made of fusel oil being used in the manufacture.

—The lay nurses of the Paris hospitals do not seem to have given the satisfaction that was expected of them at the time they were substituted for the Sisters of Charity, judging from a report to the effect that a well-known surgeon of *La Charité* has written a letter denouncing the exclusion of the latter.

—The medical society of the county of Richmond (N. Y.) is reported to have taken the step of passing a resolution prohibiting any member

from rendering professional services to any person against whom another member has a bill for like services which he is unable to collect.

—"It's no use to feel av me wrihst, doctor," said Pat, when the physician began taking his pulse; "the pain is not there, sure, it's in me hid, entirely."

—M. Martineau has observed that in a monkey inoculated with syphilis, who has already presented secondary symptoms and a syphilitic ulcer of the palate, a third manifestation has appeared—syphilitic epilepsy.

—Prof. Da Costa teaches that Addison's disease is not any indefinite affection of the supra-renal capsules, but a certain pathological process in them—a low grade of inflammation leading to cheesy degeneration. He, personally, has had best results from treatment with arsenic and cod-liver oil.

—Dr. Angus Smith, F. R. S., reports to the Local Government Board, as one of the inspectors under the Rivers Pollution Prevention Act, that in all natural waters sugar ferments and hydrogen gas is given off, the proportion varying with the organic impurity of the water. The proportion of hydrogen evolved will prove a quantitative test of the virulence of the microbes present in the waters.

—The inspection of meat in New York is in a fair way to be made more thorough than it has been heretofore, bills having been introduced into both houses of the legislature providing for the appointment of five inspectors of meat by the board of health, and making it a punishable offense to offer for sale any meat that has not been inspected by them, the inspection to be repeated every second day until the meat is sold.

OBITUARY NOTICE.

PLINY A. JEWETT, M. D.

Dr. Pliny Adams Jewett, one of the leading physicians of New Haven, Conn., died in Providence, R. I., April 10, of pneumonia. He was called as an expert both in the Hayden and the Malley trial, and he was in Providence as a witness in a murder case when seized with the disease which caused his death. Dr. Jewett was born in Hampton, Washington county, New York, in 1816. He received his education in Trinity College, Hartford, Conn., and afterward took a medical course at Yale. He was graduated from the latter institution in 1839, and went to Paris to further perfect his studies. He afterward settled in New Haven, and with the exception of two years' residence in Aiken, S. C., he has since lived there. In 1847, he married a daughter of Leicester Carrington, a prominent citizen of Bristol, Conn. For 40 years Dr. Jewett has been attending surgeon at the New Haven Hospital, and he was for 12 years Professor of Obstetrics in the medical department of Yale. During the war he was surgeon of volunteers, and was afterward promoted to a colonelcy for meritorious services. Dr. Jewett organized Knight's United States Army General Hospital at New Haven, and he had charge of it from 1862 to 1865. He was a member of the Connecti-

cut Medical Society for 37 years, serving as its president in 1876. He was also an honorary member of the New York Medical Society. Two sons and a daughter survive him.

MARRIAGES.

ATKINSON—SMITH.—In this city, at their home, April 4, 1884, by the Rev. W. W. Barr, D. D., W. B. Atkinson, M. D., and S. Jennie Smith. No cards.

BARNES—DRUMMOND.—At the residence of the bride's parents, 258 Grand street, New York, Thursday evening, April 10, 1884, by the Rev. A. D. Vail, of St. James M. E. church, Dr. Allen D. Barnes, of Boston, Mass., and Alice, youngest daughter of William L., and granddaughter of the late Sir M. J. Drummond, of this city.

CHAFFIN—HAYNES.—At the residence of Colonel S. C. Rogers (Bellevue), near White's Station, Tenn., April 3, 1884, Dr. N. W. Chaffin and Miss Katie Belle Haynes, of Gainesville, Texas.

ELMORE—URBAN.—At the residence of the bride's mother, March 31, 1884, J. P. Elmore, M. D., of St. John Baptist Parish, La., and Miss Julie E. Urban.

FAULKNER—HAGUE.—At the residence of the bride, in Allegheny City, Pa., April 9, 1884, Dr. R. B. Faulkner and Miss Emma Hague, both of Allegheny City, Pa.

FROST—RAINS.—In Nashville, Tenn., April 7, 1884, Dr. Sterling Brown Frost and Mrs. Rebecca B. Rains, widow of the late William Rains.

GREENE—HEDDEN.—At the residence of the bride's parents, on Dewey Heights, near New Albany, Ind., April 10, 1884, Dr. Frank E. Greene and Miss Annie W. Hedden, daughter of David Hedden.

JOHNSON—MATIER.—In Wilmington, Vt., April 2, 1884, by the Rev. A. W. Goodnow, Dr. Albert M. Johnson and Mary H. Matier, both of Wilmington.

LYLE—ALEXANDER.—In Belleville, Pa., April 9, 1884, by the Rev. T. R. Alexander, Dr. John W. Lyle, of Washington county, Pa., and Ada E. Alexander.

RICHARDSON—BOULTENHOUSE.—In this city, April 8, 1884, at No. 1921 Poplar street, by the Rev. Chauncey Giles, M. E. Richardson, M. D., and Miss Minnie Boultenhouse, both of this city.

SEGUIN—CROSS.—In New York, April 15, 1884, by the Rev. Alexander Mackay Smith, Dr. E. C. Seguin and Helen Cross.

DEATHS.

ILLIG.—At his late residence, Carey, Wyandot county, Ohio, Friday evening, February 8, 1884, Dr. Gus. F. Illig, aged forty-five years, two months, and twenty-six days.

BARBOUR.—Near Pilcher's Point, Carroll Parish, La., April 7, 1884, Dr. Philip N. Barbour, son of Mrs. Elizabeth G. Stewart, of Louisville.

ECKFELDT.—In Washington, D. C., April 10, 1884, Dr. Frederick Eckfeldt, aged forty-four years.

EDSON.—At Manchester, Vt., April 14, 1884, Dr. Ezra Edson, late of White Plains, N. Y., in the seventy-sixth year of his age.

GREGORY.—At Blenheim, Hanover county, Va., April 8, 1884, Dr. Thomas L. Gregory, in the fifty-fourth year of his age.

HASTINGS.—In New York, Tuesday, April 15, 1884, Dr. Dan. Hyde Hastings, M. D., in the seventy-third year of his age.

McMURRAY.—In this city, April 7, 1884, Andrew Stewart McMurray, M. D., in the seventy-fourth year of his age.

PATTISON.—At Brooklyn, N. Y., Easter Sunday, April 13, 1884, Matthew Moncrieff Pattison, M. D., son of the late John Pattison, of London, England, and Maria Hoffman, of Goshen, N. Y., aged thirty-eight years.

RAMSEY.—In Knoxville, Tenn., April 11, 1884, Dr. J. G. M. Ramsey, a historian of Tennessee, aged eighty-seven years.

SHEPPARD.—At Colorado Springs, Monday morning, April 14, 1884, Dr. Frederick C. Sheppard, in the twenty-eighth year of his age.

SMITH.—In St. Louis April 2, 1884, Dr. H. R. Smith, a native of Bridgewater, England.

THE MEDICAL AND SURGICAL REPORTER.

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PHILADELPHIA, MAY 3, 1884.

[Vol. L.—No. 18.]

ORIGINAL DEPARTMENT.

LECTURE.

SYNOPSIS OF A LECTURE ON THE TREATMENT OF CHANCROID AND SYPHILIS.*

BY JOHN ASHHURST, JR., M. D.,
Of Philadelphia.

In introducing this subject, Dr. Ashhurst said that, as he believed that chancroid and syphilis had no connection with each other, except that they were commonly acquired under similar circumstances, it might seem strange that he should join them together in speaking of their treatment. The explanation, he said, was that two years ago, when he had had the honor to address the Society on the diagnosis of chancroid and syphilis, the Society requested that on some future occasion he would speak on the treatment of these two affections. In obedience to that request he had the honor to appear to-night.

THE TREATMENT OF CHANCROID AND SYPHILIS.

If any constitutional treatment is demanded in chancroid, it is such as is indicated by the general condition of the patient. Chancroid requires local treatment, but as syphilis is a constitutional affection, its treatment is constitutional or general. Local treatment is required for certain manifestations of syphilis, but the treatment, *par excellence*, is constitutional.

Speaking first of the treatment of chancroid, we may recognize three plans which have been adopted.

First, That form of treatment which aims to abolish the whole thing at once, that is, by ex-

cision. There are certain maladies in which, by this plan, we can get rid of the disease entirely, as in the case of certain tumors. So a local disease, which has begun in one or more spots, should theoretically be removable by cutting away the diseased tissue. This plan has, however, been tried and found wanting. The great objection to it is that the wound almost inevitably becomes inoculated by the chancroidal matter, and that the resulting sore is larger than the first one was, thus rendering the ultimate condition of the patient worse instead of better.

The second form of treatment, and that which I advocate, is one which aims not to remove the disease at once, but to favorably modify its future progress. This is the treatment by cauterization. By destroying the surface of the chancroidal ulcer, we remove its virulent qualities, and leave a healthy granulating sore. The caustic application removes the tendency to spread, and converts the ulcer into a healthy granulating surface. In speaking of this tendency to spread, I refer to one of the most prominent features of chancroid, its auto-inoculability, in which it differs from the initial lesion of syphilis. Chancroid is auto-inoculable indefinitely, and I believe that cauterization very much diminishes, if it does not destroy, this property. Although the pus from the chancroid is still contagious, it seems to lose, after cauterization, to a great extent, that quality which causes it to spread to other parts on the same person. In the choice of a caustic, my preference is for fuming nitric acid, applied by means of a piece of soft wood, such as the end of a match-stick. Another plan is to apply the acid by means of a glass brush, but I do not think this as desirable.

* Delivered before the Philadelphia County Medical Society, January 9, 1884.

Every cranny should be cauterized. Any part that escapes retains its quality of furnishing auto-inoculable pus, and the whole surface may return to its former condition; therefore, cauterization must be thorough if it is practiced at all. When the slough, produced by the caustic, separates; the surface soon granulates and heals; but the pus is contagious to the last. If the fear of pain deter the patient from submitting to cauterization, general anæsthesia may be properly employed, or the surgeon may first make an application of carbolic acid, which produces local anæsthesia, and apply the nitric acid afterwards. It may be necessary to repeat the operation.

There are other modes of effecting cauterization; one is the use of the carbo-sulphuric paste, recommended by French surgeons. This forms a crust, which I think is a disadvantage, as concealing the parts beneath. The solution of acid nitrate of mercury may be used, but if applied over an extensive surface it may cause salivation. It is not as well adapted to the purpose as nitric acid. The actual cautery also has strong advocates; it may be employed either with the simple hot iron, or with the Paquelin's or the galvanic cautery. These modes of cauterization are effective in cases of serpiginous chancreoid—in the latter I think the hot iron the best application that can be made. The material used by many practitioners a few years ago, the nitrate of silver, is inefficient, and, in my judgment, has nothing to recommend it. Then for the after-dressing, after cauterization has been employed, we can use plain water, or lime-water, or black-wash, or a solution of salicylic acid, or what is known as the "nitric acid wash" (nitric acid f. 3 j; water Oj), which is much used as a dressing in New York. When the chancreoid is on a mucous surface, as in the female organs, or in any situation in which it is kept moist, a simple dry dressing of absorbent cotton or dry lint may be used; but where the chancreoid is exposed, dry dressings are apt to become adherent, and wet applications are better. The dressing above all others which I think deserves attention, is iodoform. It is a comparatively recent remedy in these cases, and I think that it is the best application that can be made after thorough cauterization has been effected. It can be used in various ways, by simply dusting the finely-powdered drug over the surface, or as a wet dressing in the form of an alcoholic solution with glycerine, viz: Iodoform 3 ss; alcohol f. 3 ij; glycerine f. 3 vj. Or it may be used in the form of an ointment, 15–30 grains to the ounce, or as an ethereal solution which evaporates, leaving a thin

film of iodoform over the surface. An old remedy, which formerly had great reputation in these cases, was aromatic wine; but I do not think it is as efficient as iodoform. Another remedy, which is quite a novel one, is resorcin, an article of the phenol series. Great advantage has been claimed for it. Pyrogalllic acid has also been used, as has the subnitrate of bismuth and various other dry powders. In the female, dressings, of course, must be applied with the aid of the speculum.

In chancreoids at the meatus, I commonly use a solution of nitrate of silver (30 grs. to f. 3 j.), since the contraction after the use of nitric acid might be objectionable in this situation. At the frænum some special precautions may be required. Deep cauterization here may be followed by bleeding, and it has been proposed to prevent this by the previous application of ligatures, tying the frænum above and below the seat of disease, or by employing the actual cautery. For chancreoids beneath the prepuce, when this can be retracted, the best plan is to cauterize the sores and dress them in the ordinary way, either replacing the prepuce afterwards, or allowing it to stay retracted, as may be thought the most convenient. If, however, the prepuce cannot be retracted, then the surgeon may inject a strong solution of nitrate of silver, or, which I prefer when it can be done, may pack the space between the prepuce and the glans penis with lint saturated with a solution of nitrate of silver (gr. xx. to f. 3 i.). Whenever it is necessary to circumcise the patient, of course the wound should be cauterized, as it will otherwise become inoculated and itself converted into a large chancreoid. As for urethral chancreoids, which are very rare, cauterization cannot be employed, as increasing the risk of stricture; absorbent cotton may be used as a dressing, taking care to have a thread attached by which the dressing may be withdrawn. About the rectum and anus, chancreoids may be treated by cauterization, with the subsequent use of emollient enemata and opium suppositories. For the phagedænic chancreoid, constitutional treatment is desirable, as in all other cases of phagedæna. Opium—one grain at night and one grain in the morning—is, I think, more beneficial than any other single remedy. In some cases it may be of advantage to remove the surface of a phagedænic or serpiginous chancreoid by scraping with a scoop, and then using as a caustic, bromine, permanganate of potassium, or caustic potassa; but I think that the hot iron is the best local remedy in these cases. Syphilization has been used for chancreoid, but it is of no value.

In regard to the principal complication of chancre, the bubo, it may be of two kinds, the simple or inflammatory bubo, which is nothing but an adenitis, or the true chancroidal or virulent bubo. I believe it to be impossible when a bubo first makes its appearance, for the surgeon to say of which variety it is. Of late years I have seen many more examples of the simple than of the virulent bubo. Whether or not this is because the disease, like syphilis, is gradually becoming a milder affection than it was formerly, I cannot say.

In regard to the treatment of bubo, the surgeon should enforce rest in bed, if possible. Then counter-irritation should be employed very thoroughly. The best way is that suggested by Mr. Furneaux Jordan, of Birmingham, by applying the counter-irritant to the "next vascular area." The theory is that by irritating an adjacent part, the blood is caused to flow away from that originally affected. Counter-irritation is best effected by applying the tincture of iodine in the form of a broad horse-shoe around the inflamed gland, every day or every other day, so as to keep the part on the verge of vesication. The skin should, if possible, not be broken, but if it is so, some soothing ointment must be applied, and the use of iodine suspended for a few days. Over the bubo itself, the dressing which I have found most satisfactory consists of equal parts of belladonna and mercurial ointments; it is a simple resolvent and anodyne application, and is agreeable to the patient. I have also used an ointment of iodoform over the part, but do not think it as efficient as the belladonna and mercury; nor do I think the application of blisters as satisfactory as the use of iodine. Pressure is another remedy which may be properly employed when the bubo is not painful, but which is ill-adapted to the acute inflammatory stage. If it is to be employed, pressure may be effected by applying a shot-bag over the bubo while the patient is in bed; or by fastening a soft sponge over the part with a spica bandage applied with the thigh flexed on the trunk. If the bubo suppurates, of course it should be opened. Various plans have been suggested, but I do not think there is anything as efficient as a moderately free incision; and the direction in which this is made is a matter of considerable importance. I find that practitioners generally open buboes in the line of Poupart's ligament, but I think that an incision in the long axis of the patient's body is the best, supplemented, if necessary, by small transverse incisions on one or both sides. If the flaps of the

wound are kept apart, so as to allow the pus to flow out readily, the process of healing is much more rapid. Multiple punctures have been employed in opening buboes, and the introduction of a seton has also been suggested; in case phagedæna attacks the bubo, the use of the continuous hot bath has been proposed. My experience is here, too, in favor of the use of opium, locally and internally, and, if cauterization is necessary, the application of the hot iron. I think that there is an advantage, as regards the bubo, in a thorough cauterization of the original chancreoid at the beginning. Bumstead and Taylor recommended that cauterization should be employed if it can be done in the first ten days; but if it is desirable in the first ten days, it seems to me to be proper at any period. These gentlemen believe that by early cauterization the patient will escape virulent bubo, and that even if an inflammatory bubo exists, its course will be favorably modified. I am aware that a directly contrary opinion is held by some surgeons, who believe that the risk of bubo is increased by cauterization; but, as far as my own experience goes, it confirms the teaching of Bumstead and Taylor.

If the surgeon is satisfied that he is dealing with a chancroidal or virulent bubo, simple incision is not sufficient. Here suppuration occurs first in the periglandular areolar tissue, and it is of great advantage to enucleate the infiltrated glands before they become disintegrated and inoculate the surrounding tissues with chancroidal matter. If the case is not seen until the whole wound has become inoculated, then I would slit up all sinuses, remove the thinned overhanging skin, and cauterize the whole surface with nitric acid, the patient being under the influence of ether.

The third plan of treatment, which is the fashionable treatment just now, is the use of simple dressings, such as I have advised for the after-treatment, without employing caustics. There is no doubt that healing will, in most of the mild, superficial chancroids met with at the present day, ultimately take place without cauterization; but I think the cure will be more certain, more rapid, and more likely to be free from complication, if the chancreoid be cauterized in the way that I have recommended.

Treatment of Syphilis.—Syphilis is a constitutional affection, and demands constitutional treatment. The principal remedies are mercury and iodide of potassium. These have been given for many years, and yet it has never been satisfactorily determined in what way they produce their

effects. Probably it is safest to say that they act by eliminating the syphilitic poison and producing absorption of the gummatous and inflammatory deposits. No doubt, according to modern theories, they might be supposed to act by destroying syphilitic germs, but that suggestion opens questions in transcendental pathology into which this is not the time to enter.

For the convenience of considering the treatment of syphilis, we may divide its course into the primary, secondary, and tertiary stages.

The lesions of the primary stage are the initial lesion (or chancre) and the bubo which accompanies it. Now, in regard to the treatment of primary syphilis, I believe that the surgeon will do well to put his patient under mercurial treatment, provided that he is sure of his diagnosis. This view is opposed, however, by some authorities for whom I have great respect. My practice is to give mercury; and the best form in which it can be given, in the primary stage, is the green iodide or protiodide. I have been in the habit of prescribing this preparation in pills with opium alone, or made up with a confection of opium as an excipient: it has the advantage that it can be used a long while without causing salivation, and it is, moreover, efficient. I think that this is the safest mode of treating syphilis in the primary stage, but no patient should be placed on a mercurial course unless the surgeon is well satisfied that syphilis is actually present.

In regard to the local treatment of primary syphilis, the principal point is cleanliness; but local treatment is not of much value. Iodoform may be used as a dressing for the chancre, as it may for the ulcerative lesions met with in the later stages of syphilis. Cauterization is of no service. I do not believe that secondary symptoms were ever prevented by cauterizing a chancre.

There is another form of treatment which has some evidence in its favor, and that is the excision of the chancre.

Until within a few years the view of surgeons was that a chancre should not be excised except under special circumstances, as when occurring on an elongated prepuce; but within recent years the excision treatment has been revived, particularly in Germany, and in this country it has been advocated by Dr. White and others. To those who, like myself, take the view that syphilis is a constitutional disease from the beginning, and that the initial lesion, chancre, is but its first manifestation, of course the excision treatment seems somewhat unphilosophical. I have no

personal experience in this form of treatment, but the weight of evidence, from what I have been able to read concerning it, seems to me to be against it. This, moreover, appears to be the prevailing view among the leading specialists in venereal affections in New York.

As regards the bubo of syphilis, no special treatment is required, though I have sometimes thought that I have derived advantage from the application of iodoform ointment.

In the treatment of the secondary stage of syphilis, of course mercury is the great remedy. Iodide of potassium is used by some surgeons in the primary stage, but for secondary syphilis all are agreed to use mercury. It should be used gradually, to prevent salivation on the one hand and intestinal irritation on the other. I think the best way in which it can be used is by inunction. I recommend the patient to rub ordinary mercurial ointment, or an ointment of the oleate of mercury, into the inner side of the thighs, using fifteen grains each morning and night, half a drachm altogether in the course of the day. If this seem too much, the remedy can be suspended for awhile, and then used in diminished doses. Another good plan is to apply the ointment to the soles of the feet, wearing woolen stockings; the place of application should be frequently changed, so as to avoid the occurrence of mercurial eczema. Before each application, too, the skin should be thoroughly washed and dried. In cases of infantile syphilis, Brodie's plan of putting the mercurial ointment on the belly-band is a good one.

If a patient objects to inunction, the mercury must be given by the mouth. The old-fashioned blue-pill is one of the most efficient preparations, if it is given cautiously; or the iodide may be used, or the bichloride, which, however, I think less useful than the others. Mercurial fumigation is a good method of treatment in certain obstinate forms of cutaneous syphilis, but is too troublesome for ordinary employment. Another mode of administering mercury is by hypodermic injections, usually of from $\frac{1}{12}$ to $\frac{3}{8}$ gr. of the corrosive chloride, though almost any preparation of mercury may be used hypodermically. I do not think that this plan presents enough advantages to counteract its disadvantages, and believe that it should be reserved for exceptional cases.

For mucous patches, constitutional treatment must, of course, be continued; and as a local remedy the solution of acid nitrate of mercury may be applied, being then followed by some simple dressing, such as black-wash, and iodoform afterwards. Another plan, recommended by Conradi,

is to use a strong solution of nitrate of silver, and then to apply metallic zinc. For syphilitic sore-throat, gargles of chlorate of potassium may be employed, or cauterizations with the liq. hydrarg. pernitratiss; or dilute hydrochloric acid may be applied with an atomizer. For syphilitic iritis, I have been favorably impressed with Carmichael's mode of treatment, which consists in the administration of oil of turpentine in large doses. I have often used this with great advantage, but have on the other hand sometimes found it to fail, and have had to come back to mercury. The oil of turpentine is given in large doses (f. ʒj.) three times a day, in emulsion with gum and sugar, with a few drops of the tincture of opium to prevent strangury. The most important point in the treatment of iritis, however, is the local use of atropia. For alopecia, cantharidal washes may be recommended.

In the tertiary stage of syphilis, iodide of potassium is the chief remedy. Mercury is useful in the treatment of the dry eruptions and of interstitial orchitis, but not in the gummatous affections, where iodide of potassium is preferable. At the same time tonics must be given, as indeed in the secondary and primary stages also. An expectant plan of treatment has been suggested for syphilis, but it is not to be recommended, nor would I favor hygienic and tonic treatment by itself, though in connection with specific treatment it is of great value. A patient who leads a regular life, avoiding the use of tobacco and alcohol, and at the same time pursuing a proper course of treatment, has a better chance of recovery from syphilis than one who neglects hygienic measures.

In giving mercury for syphilis, there are two plans of proceeding: one in which small doses are given continuously for a long time, as particularly advised by Dr. Keyes, of New York; and the other, which seems to me more philosophical, in which the drug is given "*coup sur coup*," that is, in successive courses with intervening intervals. The doses should be moderate, and salivation should be avoided. The best way is to give mercury cautiously until the symptoms are relieved, or a few weeks longer, and then to suspend it altogether. Then, if there are any fresh symptoms, the administration may be renewed.

It has been proposed by Mr. Venning, as a test to determine when syphilis has been removed from the system, to examine the condition of the inguinal glands. If there is any induration remaining, the patient is still syphilitic.

Iodide of potassium may be used very freely in syphilis. Formerly, five-grain doses were ordi-

narily given, but from eight to ten grains is now considered a fair dose to begin with, and in some cases much larger quantities must be employed. I am convinced, however, that the drug is often given in excessive amounts in ordinary cases of syphilis. I do not recommend large doses unless the disease fails to respond to smaller ones, or unless the symptoms, as in some cases of cerebral syphilis, are immediately threatening to life. The iodide may be given simply in water, or with the compound syrup of sarsaparilla, or with fluid extract of gentian, viz.:

Pot. iod.,	gr. viii.-x.
Ext. gent. fl.,	℥xv.

With enough water to make a teaspoonful. Iodoform has been given internally, and homœopathic practitioners have employed gold, but neither appears to have any special value. Sarsaparilla used to be looked upon as an important remedy for syphilis, but I have never found that it was of any use whatever. A remedy strongly recommended by the late Dr. Sims was stillingia. Dr. Taylor speaks favorably of the erythroxylon coca. Hot baths are undoubtedly of use sometimes in syphilis. For hereditary syphilis, mercury and iodide of potassium, in doses suited to the age of the patient, and combined with tonics, and especially iron, are of use. If a syphilitic woman is pregnant, she should undergo a mercurial course, in hope of preventing infection of the fœtus.

COMMUNICATIONS.

THE LANCET VS. VERATRIA IN PNEUMONIA.

BY E. MICHENER, M. D.,
Of Toughkenamon, Pa.

I have often found that men, in their opinions and practices, are very much like *cranks*—I mean mechanical, not psychological cranks. All seem to have their *dead points*; and doctors are not an exception. While we can point out those dead points in *others*, we do not readily notice *our own*; we do not see ourselves as others see us. Hence, it is an act of kindness, indeed it becomes a *reciprocal duty* to point out and correct each other's weak points.

Apropos. (See Country Practitioner, March, 1881.) The editor, *E. P. Townsend, M. D.*, writes: "In view of the recent articles by *Dr. Hiram Corson*, in the *MEDICAL AND SURGICAL REPORTER*; also, one in the February number of this journal, by *Dr. Ezra Michener*; and a reprint in the present

number of one by Prof. S. D. Gross, upon the subject of blood-letting, each of whom refers to *pneumonia* as one of the diseases whose fatality has increased since blood-letting has gone out of fashion, I have thought it advisable to report the clinical notes of a case that occurred recently in my practice."

As Dr. Townsend was kind enough to indicate what he considered our *dead points* in the papers referred to, I would gladly have reciprocated the favor, but was physically unable at the time to do so, and the journal was soon after suspended. But I feel that the obligation still awaits an acknowledgment.

Note.—I can only and briefly notice this interesting case so far as it has relevancy to the "*Lost Art*" in similar cases.

Dr. Townsend says—on what authority I do not know—"That *they* bleed to reduce the power of the heart. (?) Then, why not reduce the power of the heart with *veratria*, and save the blood? What is the use of losing the blood, when the heart can be controlled just as well without it?" This, however, is a mere assumption of the points at issue. I demur, 1, That we do not bleed for this special purpose in pneumonia; and 2, His *ipse dixit* does not prove the assumption, that the object can be obtained just as well without it.

Again, "What kept up the engorgement of the lungs? The rapid action of the heart. And, evidently, the indication was to quiet the heart."

All this may have seemed conclusive to the author, and is expressed with an air of satisfaction. But, it may be asked, whether the congestion of the lungs did not *precede* the increased heart action? Whether the congestion did not still *persist* after the heart had been controlled by *veratria*? Whether a judicious bleeding would not have *relieved* alike both of the suffering organs?

No one, I suppose, will seriously deny that the heart was accelerated by a natural effort to *overcome* increased obstruction in the lungs. It is a *normal* action, where action is *adequate* to the purpose. We bled to lessen the obstruction—to relieve the lungs of a *burden*, which they are *unable* to carry. For a practical illustration, I would refer the reader to Dr. I. H. Stubbs' report of my own case (MEDICAL AND SURGICAL REPORTER, July 8, 1882).

Other matters aside; the *death-roll* of this disease seems to indicate a fearful era when *veratria* and *whisky* were substituted for *blood-letting*.

But we are told "*that the patient had ALL HIS BLOOD IN HIS VEINS—EXCEPT what he had lost through the lungs.*" (!!!) Yes; and, pray, how much was

that??? The doctor has not told us. But he has furnished data sufficient to *create a doubt* whether his patient was cured by *veratria*, or by the free and persistent *loss of blood*, kept up continuously, for *many days*. I can only give the data, leaving it for those who are more familiar with *veratria fluxions* to find the aggregate amount of blood that was lost or saved by the *economical procedure*. Thus:

January 11, 8 p. m. Sputa considerable, *rusty*, and *blood-streaked*.

January 12, 4 a. m. More free; containing *much more blood*.

January 12, 8 a. m. More profuse, and *more bloody*.

January 13. No report.

January 14, 8 a. m. Profuse.

January 15, 8 a. m. Sputa abundant and *sanguineous*.

January 16. Less profuse; *still bloody*.

January 22. Discharged.

If the patient possessed an abnormal quantity of blood, it could have been withdrawn with relief rather than prostration. If, on the contrary, agreeably to the *Bosses*, a man never has more than a normal quantity, it is worse than idle to say, "that his system was not called upon to manufacture thirty, or forty, ounces of blood to supply deficiencies."

If my clinical experience for sixty-eight years has taught me anything, it is this, that a judicious bleeding, on the first visit, would not have caused prostration, but would have reduced the disease to a *minimum* in duration and violence, and would have prevented, or greatly lessened, the *after-bleeding* from the lungs, and all other sources of exhaustion.

I have only noticed the *dead points* of the *crank*, which seemed to require a *balance-wheel* to carry them *safely over*.

PARTIAL OSSIFICATION OF THE UTERINE SURFACE OF THE PLACENTA.

BY W. H. DEARING, M. D.,
Of Malvern, Iowa.

Was called February 20, '83, to attend Mrs. S., age 21, in her first confinement. Fifteen hours after the pains first appeared she was delivered, per vias naturales, of a male child, whose weight was ten pounds. The first and second stages of labor were unaccompanied by accident. After waiting a proper length of time for the completion of the third stage without the desired result, I introduced my hand into the womb for the pur-

pose of ascertaining the cause of the non-delivery of the placenta. I admit I was somewhat mortified to find that I had a case of adhesion; but thinking it probably was of a simple form, and that a little time would bring around the desired result, I waited two hours without my expectations being realized. I then detached the placental mass slowly with the tips of my fingers, and finally brought it away. But upon examining the uterine surface of the placenta, I was greatly surprised to find it almost entirely ossified.

Dr. Dubois furnishes an instance of an abnormal adhesion of the placenta, in which the uterine surface was covered by an osseous or cretaceous substance; and Gooch reports that he found the placenta partially ossified three times in the same woman. Monro and Merriman also report several cases where they noticed ossification on the uterine surface of the placenta, in which the latter adhered a little more than usual. In a case detailed by Dr. Stoltz, the bond of union was evidently formed by a layer of coagulated blood, which had served to arrest a hemorrhage at the fourth month of gestation. Dubois accepts this view, and attributes these adhesions to patches of a whitish nature, of a greater or less degree of hardness, evidently of a fibrinous nature, and increasing in density with the age of the sanguinous effusion of which they are the only remains.

There was no history of hemorrhage or inflammation in the history of this case prior to confinement, after which she rapidly regained her former health, and soon assumed her household duties. No uterine trouble that has made itself known by an untoward symptom, has yet appeared. What the cause of the ossification and adhesion was in this case can only be theorized upon, and it remains for some future confinement to prove whether or no she will follow in the wake of Gooch's patient, and bring forth at each subsequent labor a placenta whose uterine surface is paved with stone.

HOSPITAL REPORTS.

CASES FROM BELLEVUE HOSPITAL, NEW YORK.

Reported by J. H. WOODWARD, M. D.

Acute Lobar Pneumonia.

John A., age 42, was admitted to Bellevue Hospital February 12, 1884. Patient stated that five days prior to admission to the ward he was seized with pains in all regions of his body, and that the pain in the region of his left nipple was particularly severe. On the following day he was so sick

that he could not work. He had a chill that day, and it was followed by fever. He had no appetite, and his bowels became quite loose. The pain in his left breast became more severe than before. He had a cough, and expectorated whitish matter. These symptoms became more and more marked, until he was admitted to the hospital. On admission, the patient presented the following symptoms: He was very nervous and excited, and complained of pain in his left breast, especially when he coughed or took a deep breath; he had pains in his legs, arms, and head; his face was flushed, his appetite was pretty good, his bowels were regular, the diarrhoea having ceased. Temperature 103 F.; pulse 130 and weak, but regular. Physical examination revealed rude breathing and exaggerated voice over the middle of the left scapula; sputum is thick and muco-purulent.

Treatment.—Whiskey 3ss., and liq. morphia, U. S., 3j, every three hours.

February 13. Patient is more quiet. His face is still flushed, and his conjunctiva are injected. Last night his temperature rose to 103½ F.; this morning it is 102¾ F.; his pulse is 100, and stronger than when the patient was admitted. He complains of pain in the axillary region on the left side low down, and has also severe pain in the head when he coughs; his appetite is good; bowels have not moved. At noon to-day his temperature rose to 104 F., and a sponge bath was ordered. One hour later his temperature was 103½ F. His pulse continues good.

Physical Signs.—Dullness over the lower half of the scapula and subscapular region on the left side. Bronchial voice and breathing are heard in the same regions.

Treatment the same.

February 14. In the morning the patient's temperature was 101° F.; in the afternoon it was 103¾ F. He is more restless and irritable than he was yesterday. His pulse is 96, full, regular, and strong. He complains very little of pain or dyspnoea. He coughs a great deal, and the abundant expectoration is tinged with blood. Patient is perspiring profusely. His appetite is pretty good. His bowels are confined. Bronchial voice and breathing less marked, and some rales are heard over the base of the left lung.

Treatment.—Whiskey, carbonate of ammonium, fluid extract of convallaria, and U. S. sol. morphia.

February 16. Patient has continued in about the same condition since the last note. He coughs a great deal, and expectorates muco-purulent sputa. Now he has no pain except when he takes a full inspiration. His temperature ranges between 101½° and 103° F. His pulse is 90, and full and regular and strong. Appetite continues to be pretty good. Bowels regular. Physical signs are those of resolution. Treatment the same.

February 18. Yesterday patient's temperature range was from 100½° to 101½° F. This morning it is 99° F. Pulse is 70, full, strong and regular. Eats and sleeps well. Coughs but little. The expectoration is still tinged with blood. Rales more numerous than ever before since the patient has been in the hospital. The same treatment is continued.

February 20. The improvement has been steady

until to-day. This morning the patient's temperature is $99\frac{1}{2}^{\circ}$ F.; pulse 80, full, strong, and regular. He has more dyspnoea, and more pain in the left chest behind. Physical examination shows that the disease is resolving satisfactorily in the lower portion of the lung, but that bronchial voice and breathing have developed in the upper lobe.

Treatment.—Whisky, carbonate of ammonium, and morphine.

February 23. The patient's temperature is still as high as 100° F. His pulse is about 50, and is satisfactory. The patient still coughs and expectorates. He has no pain. He eats and sleeps well, and physical examination shows that the disease is resolving perfectly. Ordered whisky $\frac{3}{4}$ ss, t. i. d., and morphine sulph., gr. $\frac{1}{8}$, once a day.

February 27, The patient has steadily improved since the last note. He is now allowed to go about the ward at will. He has no cough, expectoration, or pain.

Physical examination reveals a normal condition of the lung; his temperature and pulse are normal; he eats and sleeps well.

February 28. Patient discharged from the hospital cured.

Acute Pulmonary Tuberculosis.

Wm. C., age 42, admitted to Bellevue Hospital February 20, 1884. Patient was brought to the hospital delirious from alcohol, and was under treatment for alcoholism in the ward devoted to such patients for three days. He was then in a suitable condition to be transferred to one of the general medical wards, and that change was made accordingly. He then, being in a rational condition, stated that he had had a slight cough for six weeks, and that he expectorated more or less thick, white matter. One week prior to admission to the hospital, the patient had a chill, which was followed by an exacerbation of the cough and expectoration; and he suffered from some prostration. The patient had no dyspnoea, and he did not feel any pain in his chest, except when he coughed very hard. His appetite had failed, his bowels had been constipated, and he had suffered lately from night sweats. He had been addicted to the use of alcoholic spirits, but had not been subject to the symptoms of Bright's disease, so far as could be ascertained.

On admission to the general ward his temperature was $101\frac{1}{2}$, and soon rose to $103\frac{1}{2}$; his pulse was 100 and feeble; his face was flushed, and he coughed and expectorated muco-purulent matter.

Physical signs: Percussion at the right apex gives dullness. Over both sides of the chest there was rude breathing, with numerous sonorous, sibilant and moist râles. Ordered tinct. digitalis.

February 24. Temperature 101 all day. His pulse is stronger; his appetite is fairly good; bowels constipated.

February 25. The temperature range is between 101 and 102 , and generally fluctuates with regularity. It is sometimes higher in the evening, and again the rise will occur in the morning. His pulse is small and feeble; he sweats at night, and feels very much prostrated; he coughs a great deal, with expectoration; he has no pain or dyspnoea; his voice is hoarse.

Physical examination: The râles heard at the former examination have nearly all disappeared, excepting at the apex of the right lung, where they are still numerous and loud. In the same region a peculiar, low-pitched respiratory murmur is heard, the exact nature of which cannot be determined.

Treatment.—Stimulants and medicines to relieve the cough.

March 3. Since the last note, patient has been in about the same condition. Yesterday his temperature was 102° all day, and this morning it is $103\frac{1}{2}^{\circ}$. His pulse is 110, small and feeble. Appetite is poor, and bowels are regular. He coughs a great deal, and has a great deal of expectoration.

The same treatment continued.

March 7. This morning his temperature is lower than usual, it being 99° . His pulse is 120 and very weak. The cough and expectoration continue, and are not relieved by anything. Since the last note patient has been failing rapidly, and now he is in a very weak condition. He vomits profusely. His tongue is dry and coated, and he complains of great thirst. He has had some dyspnoea. No decided change in the physical signs.

March 10. Patient is steadily failing. His temperature ranges between 100° and 103° every day. He is now unable to sit up in bed. He perspires profusely. Physical examination: Over the left apex in front, dullness on percussion, cavernous breathing, and moist râles; over the right apex in front, dullness on percussion, broncho-cavernous breathing, and subcrepitant râles; over the left lung behind, dullness on percussion, rude breathing, and subcrepitant râles; over the right side behind, over the apex, broncho-cavernous breathing and subcrepitant râles; over the base of the lung, rude breathing, with diminished intensity.

March 13. Patient has been steadily sinking since the last note. His temperature has oscillated in its usual manner. His pulse is very feeble. This morning he gradually became more and more stupid, and developed the symptoms of oedema of the lungs, and died.

Autopsy.—Lungs: fresh pleuritic adhesions over the left lung. At the apex of the lung there was a large cavity, and about it there were several smaller cavities. The remainder of the lung was quite solid, and it was studded with large numbers of small tubercles. Over the right lung there were no pleuritic adhesions. The bronchi were dilated, and one bronchus was becoming broken down into a cavity. The upper half of the lung was consolidated, and was studded with a large number of large and small grayish-white masses. The microscope confirmed the opinion that the lungs were the seat of a tuberculous deposit.

Liver: presented signs of interstitial hepatitis and fatty degeneration.

Kidneys: chronic diffuse nephritis.

The intestines were normal, excepting the ileum, which presented one small ulcer. The remaining organs did not present anything worth recording.

Acute General Peritonitis.

Mary K—, aged twenty-two years, admitted January 17, 1884. The patient states that eight days ago she was exposed to cold and wet while

menstruating. After that she had headache, pain in her back, and general malaise. Three days ago she had a severe chill, and was obliged to go to bed at once. The chill was followed by a febrile movement, nausea and vomiting, and severe pain in her abdomen. She also had a slight cough. Her bowels had been loose, but became constipated after the chill. During the last three days her symptoms have steadily increased in severity, *i. e.*, the abdominal pain, the nausea and vomiting, and the febrile movement had become more marked; and, when brought to the hospital, she was quite weak. The abdominal pain was most severe in the right iliac fossa.

Examination on admission to the ward revealed the following symptoms: Temperature, $102\frac{3}{4}^{\circ}$; pulse, 110 and fairly good; abdomen, tympanitic and tender. Patient complained of pain in her abdomen, chiefly in the right iliac fossa. Her tongue was dry and coated. She lies on her back.

Treatment.—Poultices to the abdomen, to be changed every two hours. Magendie's solution of morphine as often as necessary to control the pain.

January 19. This morning her temperature is normal; her pulse 110 and fairly good. Yesterday she was given a simple enema, which moved her bowels. To-day her abdomen is as tympanitic as when she was admitted. She is very much nauseated, and feels drowsy and stupid. Her pain is less severe.

The same treatment is still continued.

January 21. Yesterday, patient's temperature sunk once as low as 98° , but it has been rising slowly since, and is $100\frac{1}{2}^{\circ}$ this morning. Tympanites and abdominal tenderness less marked. Her bowels have moved twice during the last twenty-four hours. She vomits now and then. Her tongue is dry and coated. Pulse 99, and pretty strong. Treatment the same.

January 23. Temperature range since the last note has been between 99° and 100° . She is no longer suffering from nausea and vomiting. Her bowels have not moved since the last note. Tympanites and abdominal tenderness subsiding. She begins to show signs of liking her food. Treatment the same.

January 28. Patient has improved steadily, and nothing has occurred worthy of note. The treatment has not been changed. The quantity of morphine administered is just sufficient to control the pain. The patient has never been narcotized with the drug. To-day some unusual excitement occurred in the ward, and the patient's temperature rose promptly to $103\frac{3}{4}^{\circ}$. Her pulse became more rapid, and she complained of an increased amount of pain in her abdomen, and of considerable uneasiness about her stomach.

January 29. Temperature 101° this morning. Abdomen very tympanitic. Bowels constipated. Patient is much sicker than she was on the day before yesterday.

January 31. Patient has had a pretty high temperature since the 28th inst. To-day it rose to 104° .

February 1. Temperature $98\frac{3}{4}^{\circ}$; pulse between 90 and 100, fairly strong and regular. She feels sick at her stomach, and vomits occasionally. Her bowels are constipated. The abdominal tenderness has diminished very much. She sleeps well.

Treatment.—Wine, ʒij. , every three hours; liq. morphine, U. S., ʒj. , every three hours; and Magendie's solution, p. r. n.

February 2. Temperature rose in the evening to 104° again, and the patient was exceedingly restless, in spite of large doses of Magendie's solution. Her pulse became rapid and feeble. She vomited several times, and had more pain than at any time for a number of days. She was given a simple enema, which relieved her very much. Her bowels had not moved for five or six days.

February 3. Temperature is 99° this morning, and the patient feels much better than she did last night. Same general treatment continued.

February 5. At noon to-day her temperature was as high as $102\frac{1}{4}^{\circ}$.

February 6. Temperature this morning was $98\frac{3}{4}^{\circ}$; pulse 72, and satisfactory. She has some pain in her abdomen still, and still lies upon her back. No vomiting. Abdominal tenderness much diminished, and tympanites not marked. Her bowels move more regularly. Treatment the same as before.

February 9. Temperature and pulse normal. Very little pain in her abdomen now, and no tenderness or tympanites. Bowels move regularly. She looks much brighter, and sleeps well. Ordered wine ʒij three times during the day and during the night; morphine when necessary; poultices removed.

February 13. Patient is allowed to sit up in bed, and partook of a little solid food for the first time since she has been in the hospital. She does not suffer any pain now. Her bowels are inclined to be constipated, and the patient is pretty weak. Treatment the same.

February 19. For a number of days she has been out of bed, and allowed to go about the ward. Now she feels perfectly well, and is gaining in flesh and strength, and eats and sleeps well. She was discharged cured.

Surgical Septicæmia.

Henry J., age 39 years, German, carpenter, admitted to Bellevue Hospital December 1, 1883. Patient came to the hospital with the following history: One week prior to admission he had been injured by one of his tools, and received a lacerated wound upon the anterior surface of his left forearm. This wound was dressed by a physician, and was not looked at again until the patient presented himself to me. On admission to the hospital the patient exhibited a large ulceration on the anterior surface of his forearm, which exposed the superficial layer of muscles. His hand was swollen and oedematous. About the ulcer, the surface of which was in an unhealthy condition, there was a well-marked erysipelatous blush. The patient was accordingly transferred to the erysipelas ward, where he remained one week, and was then sent back to me for further treatment, since he had recovered from erysipelas.

On his return to the ward the patient exhibited the following symptoms: His general condition was pretty good, although he was weak and anemic. During the time he was in the erysipelas ward his temperature was normal, that is to say, it had not risen above 99° F. His left forearm was very much swollen, the palmar surface presenting a large ulcer six by three inches in size.

There were several incisions into the forearm, from which pus flowed. Through the ulcer the finger could be passed, between the planes of muscles and the individual muscles, into extensive sinuses, which were filled with sanious pus. The whole anterior of the forearm was literally riddled by extensive sinuses, which led over to the surface of the bones. The bones were not bare at any point, however. The dorsum of the hand was very cedematous, and at a number of points fluctuation was detected.

Incisions were made into the hand at various points, and a considerable quantity of unhealthy pus evacuated. An aqueous solution of corrosive sublimate, of the strength $\frac{1}{2000}$, was forced into every portion of this extensive region of disease. And the forearm and hand were enveloped in a dressing composed of carbolized gauze, wet in $\frac{1}{40}$ carbolic solution, placed next to the wound, and over all borated cotton.

Patient's temperature rose to 110° F. that evening, and remained high for two or three days. During this time he developed the following symptoms: He became very apathetic; his skin and tongue became dry; his pulse was rapid and feeble; his bowels were constipated; his temperature was at least 100° F., and he had no appetite. His arm was carefully dressed with every attention to antiseptic precautions at least once a day. Drainage was secured perfectly by the introduction of about one dozen rubber tubes into the various sinuses and pus cavities. These tubes were introduced as early as the third dressing of the case. The affected district was constantly irrigated with the corrosive sublimate solution at every dressing. Every part where pus might lodge was carefully irrigated again and again with the mercury solution. And the carbolized gauze was wet in the same solution, and applied wet, after the third dressing. Iodoform was not used for fear of poisoning by it. The forearm and hand were elevated and steadied by a dorsal splint.

This was a case in which constant irrigation of the wound should have been the first choice in the treatment. That plan was seriously considered, but obstacles were in the way of its employment, and it was rejected.

Under this treatment the patient improved until December 18, when after having remained steadily for a number of days at the normal point, his temperature rose to 103° F., and continued high for twenty-four hours. The dressings were changed twice on that day, and the patient's temperature remained as high as 100° F. The strength of the corrosive solution used was doubled. His general condition was not satisfactory. He was very apathetic still, and his tongue was dry and cracked, and his teeth were covered with sordes. His skin was dry and his bowels constipated. His right eye presented a corneal ulcer. Large quantities of sanious pus still flowed from his forearm. The patient's condition was so desperate, and the task of disinfecting the source of his septicæmia was so great and hazardous, that the question of amputation was considered. But it was decided that the patient was so weak that he might perish from the shock of the operation, and that his best chance lay in continuing the treatment already adopted.

Within forty-eight hours after beginning the use of the stronger solution of corrosive sublimate, the patient's temperature fell to normal, and did not rise above 99 again. For about a week the case was dressed twice a day, and thoroughly disinfected with the $\frac{1}{1000}$ solution. After that the dressings were only changed once daily. Patient's general condition improved slowly, but steadily, while the condition of his forearm improved. The purulent discharge from the patient's wounds became smaller in amount and more healthy in character.

January 1. Patient has improved so much that it is not necessary to dress his wounds every day, and the $\frac{1}{2000}$ solution of corrosive sublimate is used instead of the stronger solution. The sinuses and ulcer in the forearm are granulating satisfactorily, and only a small number of drainage-tubes are necessary now. He is much brighter and stronger.

January 12. He was allowed to sit up.

February 1. Discharged, to return as an office case. The sinuses have filled up, and a superficial ulcer only remains of all the extensive granulating surface. The patient returned to the hospital several times to have his arm dressed, but, unfortunately, ceased to come before he should have done so. At his last visit his forearm presented a small, perfectly healthy ulcer. The wrist-joint and the phalangeal joints were in a state of false ankylosis, which yielded readily to passive motion. The patient's hand and forearm might have regained their power and usefulness in a short time, I have no doubt, had passive motion, frictions, and douches been carefully and steadily employed.

In addition to the vigorous antiseptic management of the wound, powerful stimulation with whiskey, wine, and digitalis, was necessary. Iron and small tonic doses of quinine were given day and night, together with the stimulants, and the patient was urged to drink plenty of milk. His bowels were kept open with laxatives. During the most serious period of his illness, the patient received several sponge baths, the temperature of the water used being as high as 104, at least. These baths were given in order to improve the condition of the skin, which was very dry, and did not perform its function properly. They apparently benefited the patient.

In this case there are many square inches of raw surface which was not covered by granulation tissue for a certain time, and which was covered by that tissue later. Upon this surface, every day, for a considerable period, quarts of the aqueous solutions of corrosive sublimate were poured. The bichloride was kept constantly applied to the large ulcer on the forearm, for the gauze used was saturated with the mercury solution. And yet the patient did not at any time show the first symptom of mercurial poisoning. Had strong solutions of carbolic acid been used, instead of the bichloride, there then can be little doubt that we should have had a case of poisoning by that acid.

Rupture of Intestine.

John O'R., age 17, driver, was admitted to Bellevue Hospital in October, 1883. He came to the hospital with the history of having been run over by a truck, the wheels of which passed over the

middle of his abdomen. He was thrown into considerable shock by the accident, but rallied sufficiently to walk to the ambulance, a distance of two or three rods. He did not complain of much pain, and wished to go home, after he had reached the hospital. On the following morning he was transferred to Bellevue. When he reached the ward his pulse was weak. He was not in much pain, and conversed rationally. His abdomen was tender, but not tympanitic, and it did not present any signs of injury, beyond the tenderness. The patient was in shock, although he appeared to be in very good condition. His temperature was normal. Two hours after admission the patient died.

Autopsy twenty-four hours later. Abdomen very tympanitic. The right side of the scrotum is very large, and suggested the existence of a hernia. The usual incision in the median line was made, and gas was found in the peritoneal cavity. There were the usual signs of acute general peritonitis, and the omentum was very much confused. There was no hernial protrusion at any point. But the enlargement of the right side of the scrotum was due to the presence of gas in the sac of the tunica vaginalis. The right inguinal canal was not unusually patent. Beneath the visceral layer of the peritoneum there was gas, which had forced its way to this situation from a vent in the duodenum. This gas, beneath the peritoneum, exhibited a very striking phenomenon. The appendices epiploicæ were inflated with the gas, and looked like a large number of shining glass bulbs suspended from the transverse colon.

Fæcal matter had been extravasated into the peritoneal cavity through the rent in the small intestine. The right kidney was ruptured in several places, and the rupture went through the cortical substance. There was bloody urine in the sinuses of this kidney, but no blood had been noticed in the urine before death. The remaining organs of the body were in good condition.

The observation of the presence of gas in the sac of the tunica vaginalis in this case of ruptured intestine proves that such a thing may occur, even when the inguinal canal is normal. And the fact may become a significant one in some case in the future. For, omitting other signs of rupture of the intestine, the presence of gas in the sac of the tunica vaginalis, in cases where no local cause for it exists, would, in cases where the abdomen was tympanitic, be pathognomonic of rupture or perforation of the intestine. The determination of the existence or absence of a lesion of the intestine when it is suspected, becomes a very important matter, both for the proper prognosis and for the proper treatment of the case.

was used; there was a great deal of pain, and marked neuropathic tendency; insanity in the family in one case. There is one difficulty in the treatment by atropine—that it sometimes causes disagreeable symptoms, especially in delicate women. In one case, where the drug was pushed, it caused such distress that the patient, a woman, refused to take it longer. Atropine in large doses cannot be used in all cases therefore."

Dr. C. L. Dana said, "that Dr. Leszynsky was entitled to great credit in employing atropia against such physiological odds. He believed that the cure was due to the employment of atropia. One point must be borne in mind, and that is that we must select our cases. In those cases where the disease is plainly neurosis, atropine may answer. In many cases, however, the disease appears to be of a peripheral and rheumatic character. Here anti-rheumatic remedies answer better."

Dr. Gibney: "In view of the fact that Dr. Leszynsky administered electricity and other agents, as his report shows, some doubt might be expressed as to the curative effects of the atropine injections. The relationship of cause and effect does not seem sharply enough defined. I have had no personal experience with this drug in torticollis. A few years ago, in a case of rotary spasm of the head, I had a very prompt and excellent result in the use of the fluid extract of gelsemium carried to tonic doses. Dr. Leszynsky certainly deserves credit for the heroic dosage of atropine in this case."

Dr. Birdsall related the history of a case of torticollis treated at the Manhattan Hospital by his assistant, Dr. Perribery, in a child about eight years of age, by the application of as strong a galvanic current as could be endured for from twenty to thirty minutes, on the affected muscles, three times a week, for several weeks, with gradual improvement, which finally terminated in complete recovery. Tincture of belladonna was administered in drop doses, until slight physiological effects were produced. Dr. Birdsall was inclined to credit the curative effect in this case mainly to the galvanism, though he thought that a combination of the method with atropia and that of galvanism, would in general be far more serviceable than either alone.

Dr. Weber: "Was a traumatic effect produced by the hypodermic injections?"

Dr. Leszynsky: "The injections were made into the substance of the muscle, and no traumatic effect was produced. The preparation of atropia used was Morck's, and the solution was freshly prepared every two or three days."

Remarks of Dr. David Webster:

"Mr. President: I have listened to Dr. Leszynsky's paper with much interest. Although I have seen but few cases of wry neck, I have had a good deal of experience with atropine, and I beg leave to question whether the same results might not have been accomplished by smaller doses applied locally. For the purpose of relaxing the sphincter pupillæ and the ciliary muscle, we never give atropia by the mouth or hypodermically, but always apply it locally—to the surface of the eyeball. Less than one twenty-thousandth of a grain applied to the conjunctiva will paralyze the muscles I have named, while it would require a many

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NEW YORK NEUROLOGICAL SOCIETY.

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DISCUSSION.

Dr. J. C. Shaw: "I have been called three times in consultation in these cases where atropine

times larger dose to produce the same effect if given hypodermically.

"It is remarkable that Dr. Leszynsky's patient tolerated so large a dose as one-sixth of a grain. There is a wide difference in the quantity required to produce the physiological effects of the drug in different persons. I have frequently seen a drop of a four-grain solution, applied to the eye, produce the peculiar scarlet flushing of the face, especially in infants. I also know of a case in which a single drop in the eye caused marked delirium in a young lady, so that she had to be taken home in a carriage. I have had some personal experience with the physiological effects of atropia. I once swallowed what I supposed to be ten drops of Magendie's solution of morphia, to check a diarrhoea while I went to Brooklyn to assist in an enucleation. On the way, I noticed that I felt very strangely, going off into curious dreams, entering into imaginary conversations, etc. When I got to the place of operation, I found on attempting to talk that I could scarcely speak above a whisper, my mouth and throat were so dry. Dr. Agnew noticed that my face was flushed and my pupils dilated. I went home and went to bed, and slept soundly until the next morning. As soon as I awoke, it dawned upon me that I must have taken atropine instead of morphine. As soon as I saw Dr. Agnew, he told me he had arrived at the same conclusion. I found the atropine and morphine bottles side by side on my table. The mystery was explained.

"I once saw a case in the practice of a brother practitioner where one-sixteenth of a grain of sulphate of atropia given with half a grain of morphia subcutaneously produced delirium, lasting for half a day or more. This was in a hysterical lady who was used to hypodermics of morphia without atropia.

"Dr. Leszynsky's method of giving the drug was a perfectly safe one, however, as he cautiously felt his way from smaller to larger doses."

Dr. G. W. Jacoby said: "It was not my intention to make any remarks upon this subject, as the objection which I intended to raise to the indiscriminate employment of galvanism and atropine in the treatment of Dr. L.'s case, has already been made by some of the preceding speakers; but Dr. Gibney's remarks in reference to the facility of producing the physiological effects of atropine, in some cases, by very minute doses, recalls to my mind very vividly a case in which this was also very noticeable. The patient, a girl, aged twelve years, came to me affected with a left-sided tonic torticollis, probably of rheumatic origin. My results with electricity upon other cases having been unsatisfactory, I determined to treat this case by the hypodermic injection of sulphate of atropia. I therefore injected $\frac{1}{16}$ of a grain of the drug.

"This one injection produced all the symptoms of atropine poisoning, ending in a violent delirium, which lasted for ten hours.

"When the patient had recovered from the effects of the atropine, I naturally felt reluctant to continue its use, and began treatment of the torticollis by galvanism. After two weeks the child was discharged from treatment entirely recovered.

"The points which I wish to mark are, firstly, the small amount of atropine necessary in this

case to produce delirium; and secondly, the fact of a cure by self-limitation, or possibly through the action of the galvanic current. Had no ill effects resulted from the use of the atropia, I would probably have continued its use, and my patient recovering, it would have been only natural to attribute this recovery to the use of the atropine.

"Therefore, we cannot be too cautious in drawing our conclusions from a single case, no matter how well observed; and we should be very careful not to use two potent remedies, such as galvanism and atropine, simultaneously, as our skepticism in regard to the efficiency of either one will not be considered scientific proof of the beneficial action of the other."

Dr. Leszynsky, in closing the discussion, said:

"As Dr. Dana saw the patient referred to in my paper, I am pleased to hear that he agrees with me in stating that recovery was due to the employment of the atropia.

"In reporting the history of this case, I expected that the question would arise as to which of the remedies employed had effected the cure, therefore I was not surprised to hear the criticism of Drs. Gibney and Jacoby; and in reply I will state that the number of cells used in applying the galvanic current was from ten to twenty of a Stohrer portable battery. The patient could not tolerate a stronger application, and this was continued for nearly fifteen minutes daily. After the removal of the electrodes, I found that the spasm invariably became more vigorous than ever, and I always allowed about ten minutes to elapse before injecting the atropia.

"I would again direct the attention of the society to the fact that notwithstanding the daily application of galvanism in conjunction with the use of atropia, no improvement was shown until the twentieth day, soon after a rapid increase of the atropia from gr. $\frac{1}{16}$ to nearly gr. $\frac{1}{8}$. Then the improvement became so evident that it can hardly be doubted that the atropia was the important element which effected the successful result. In regard to the use of the bromide of sodium, I can safely say that bromism was not produced. The faucial reflex was frequently tested, and remained well-marked throughout the entire course of treatment.

"Dr. Webster's suggestion may be a very good one if we accept it from an ophthalmological standpoint, but in this class of cases I cannot see what advantage could be gained by the inunction of the oleate of atropia.

"The object in using this sulphate of atropia was to produce paralysis of the trunk and branches of the spinal accessory nerve, therefore it was injected into the substance of the muscle for the purpose of producing its local effects on the motor nerve, although eminent authorities like Ringer and Traser have concluded, after an elaborate series of experiments upon living animals, that atropia paralyzes the motor nerves through its action upon the spinal cord, and not by the action through the circulation. I believe that the oleate if applied locally would produce more rapid constitutional symptoms on account of its speedy absorption; and another objection is that the dose cannot be so accurately determined.

"In conclusion, I will state that the patient remains well, and that no sign nor symptom of spasm has since been shown."

NOMINATION OF OFFICERS FOR ENSUING YEAR.

President—Birdsall, Gray, Morton, W. A. Hammond.

First Vice-President—C. L. Dana.

Second Vice-President—G. W. Jacoby.

Recording Secretary—E. C. Wendt.

Corresponding Secretary—W. M. Leszynsky.

Treasurer—E. C. Harwood.

Councillors (five)—Weber, Seguin, Jacoby, Morton, W. A. Hammond, McBride.

The society then adjourned.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Discussion on the Treatment of Chancroid and Syphilis. (See p. 545.)

Dr. J. William White opened the discussion by saying that there were a few points as to which he differed from Dr. Ashhurst, and to which he would take the liberty of alluding. The treatment of chancroid as proposed by Dr. Ashhurst, had some distinct disadvantages; in the first place it is very painful, and as a matter of fact it is not practicable to etherize one's office-patients, for the purpose of cauterizing chancroids. In the next place, cauterization increases the liability to suppurating bubo. Cases of the latter complication had been much rarer in his practice since he had stopped the indiscriminate cauterization of chancroids, and, in fact, for several years past he had seen them in hospitals, where the cases have been cauterized before admission. Another strong objection to cauterization is that it is extremely apt to produce phymosis, and thus convert an exposed sore into a concealed one much more difficult to treat. If the prepuce were retracted and left so after cauterization of the sore, as recommended in some cases by the lecturer, paraphymosis, an even more annoying complication, would almost certainly result. Then, too, the diagnosis of the sore is rendered more difficult by the cauterization. He did not believe chancroid to be a specific sore in the sense that it is due to a special poison, producing only this form of ulceration, but thought it was due to pus-contagion, owing all its distinctive peculiarities, if it could be said to have any, to the anatomical and histological peculiarities of the parts involved; he was convinced that his cases got well more rapidly when cauterization was omitted than when it was employed. As to cases which *should* be cauterized, they included in his practice only those sluggish sores which refused to take on reparative action under milder stimulus, and those phagedænic sores which are accompanied by rapid and dangerous breaking down of tissue. When a cauterant is necessary, fuming nitric acid was, in his judgment, the one to be preferred. The majority of cases do not require cauterization, and he thought could be best treated by observing the local indications; if the ulcer is inclined to be sluggish, a ten-grain solution of sulphate or acetate of zinc, or a six-grain solution of sulphate of copper, or a thirty to sixty-grain solution of nitrate of silver, will often cause it to take on healthy action; if the ulcer is red with exuberant granulations, or surrounded by an inflamed area, then lead-water and laudanum would be indicated, or a weak solution of zinc in laudanum and rose-

water. Iodoform will often effect a cure more certainly and rapidly than any other remedy, but the objection to it is the penetrating odor so offensive to many persons. He had tried all sorts of perfumes and pharmaceutical disguises without effect, and had finally adopted the plan of advising his patients to tie up a finger with some of the ointment, thus diverting suspicion from the true cause of its employment.

His experience in the Philadelphia Hospital had left him convinced that in the treatment of phagedænic and serpiginous ulcerations, bromine was the best local application; fuming bromine should be applied freely, not only to the surface of the ulcer, but also to all its interstices; it is afterwards covered by oiled lint. He had tried the so-called "horse-shoe" method of counter-irritation in bubo without much benefit, and favored pressure with a shot-bag or half brick covered with flannel.

As to the suppurating bubo, he agreed with Dr. Ashhurst as to the mode in which the incision should be made in opening it, but said that curiously enough it was for a directly opposite reason. He made the incision parallel with the long axis of the body, so that the lips of the wound would *not* gape. When the incision was made parallel with Poupart's ligament, whenever the thigh was extended on the body, the attachment of the fascia lata to the lower lip or wall of the suppurating cavity, and the attachments of the abdominal muscles and fascia to the upper wall, resulted in a wide separation of the wound, making a larger cavity to fill up with granulations, and thereby delaying complete recovery very considerably.

In the treatment of sub-preputial chancroids he would hesitate, for the reasons stated, to retract the prepuce and cauterize, even if it were possible to do so, which would rarely be the case; he considered the paraphymosis, which would almost invariably result, a very objectionable complication; as to packing the space between the glans penis and the foreskin with lint, he believed it in the great majority of cases to be practically impossible, without exciting a degree of pain, inflammation, and hemorrhage, highly prejudicial to the patient: a certain amount of lint might be stuffed in, but he doubted that it could do anything but harm. In his cases of concealed chancroid—or of balanitic or herpetic ulceration with phymosis—he said he directed patients to clean the parts every two hours, injecting with a Taylor's subpreputial syringe, warm water and castile soap; then to wash away all the soap with plain warm water, and then finally to inject a solution of zinc in laudanum and rose-water, five to ten grains of zinc to the ounce of the mixture.

The local treatment of the infecting sore or true chancre was chiefly interesting in regard to the question of excision. If it were believed that the chancre was the first symptom of constitutional syphilis, it would, of course, be illogical to remove the sore with any idea of preventing systemic infection; but if, on the other hand, it were thought that the poison of syphilis, whatever it might be, found its way into the blood, and into the tissues from a point of original inoculation—the chancre—through the medium chiefly of the lymphatics—then it would be entirely philosophical to excise the sore in the hope of preventing constitu-

tional disease. This was the view which he was inclined to favor.

The argument that in the majority of cases excision of the sore fails to prevent general disease, does not in the least affect this view of the matter. It is to be expected that in most instances a portion of the *materies morbi* would have passed beyond the reach of the knife before producing sufficient local symptoms to attract attention. Consequently the majority of cases fail, and always will fail. The possible errors due to mistaken diagnosis, or to the *post hoc ergo propter hoc* method of reasoning, were, of course, familiar to all syphilographers; but it seemed manifestly unfair to include all the reported cases of successful excision of chancre under those heads. The only ways in which the true character of a hard chancre can be determined prior to the occurrence of constitutional infection, are by its microscopical peculiarities and by "confrontation," or inspection of the person from whom it was obtained. Such cases must of necessity be very rare. He had been fortunate enough to have seen two of them—in both of which the sores, which were situated on the prepuce, had been excised and no constitutional syphilis had followed. They were obtained from women with marked secondary syphilis, and were examined microscopically by Dr. Simes, who found them to possess all the peculiarities of Hunterian chancres. Even two such cases, he thought, ought to be given great weight in a fair consideration of the question.

When, however, the sores are not seen at a very early stage of their development, or when they are situated on the glans penis so that their removal will cause deformity, or will give rise to much pain or hemorrhage, he thought the chances of preventing constitutional disease not sufficient to warrant the operation.

As regards the important question of the proper time for beginning constitutional treatment, Dr. Ashhurst's opinion did not seem to him to be consistent with the received facts of syphilography. It was an undisputed axiom that there is no absolute proof of the infecting nature of any given sore except infection itself, as manifested by certain constitutional symptoms. Mercury indefinitely delays or altogether prevents those symptoms, and its administration at the time recommended by Dr. Ashhurst would leave both patient and surgeon in doubt for all time as to the presence or absence of syphilitic taint. As the proper treatment of syphilis involves a prolonged course of mercury, and the surgeon is compelled to insist upon abstinence from matrimony, or, if the patient is already married, the avoidance of conception, the responsibility is very great, and therefore nothing but entire certainty would justify the beginning of treatment. Where confrontation aids the diagnosis, it might, perhaps, be allowable to begin sooner—but, although doubtless it is desirable to give mercury as early as possible, it has been abundantly shown that no great harm results from delaying its administration until the roseola or at least the general glandular involvement has established the fact of syphilitic infection.

After alluding to the various theories for using mercury, he said his own plan was to give it by the mouth, in the form of the protiodide. He

gave four pills a day for two days; then six pills for two days; then eight pills for the same period, and so on, until the patient's gums or his posterior molars became a little sensitive, or his saliva thickened and became more profuse; then the dose was usually divided by two, or if the toxic effect had been produced by a daily dose of only six pills, the subsequent or permanent dose (the so-called "tonic" or physiological dose) was reduced to two-thirds of that, or four pills. He thus determined in each case the quantity of mercury required to affect the new formations of syphilis, as it is well known that embryonic cells or tissues have less resistant power to either therapeutic or pathological forces than the normal cells. This dose was then continued, subject to increase in case of an attack of new symptoms, for a period of eighteen months to two years. Afterwards, he said, he put the patient on the mixed treatment of biniodide of mercury and iodide of potassium for six months. He then stopped and kept him under observation, returning to the mixed treatment if any new symptom appeared, and continuing it for several months.

Going over his case-books for the past seven years, rigorously excluding all hospital and dispensary cases, and all cases which had not been under his care and observation continuously from the primary sore down to the present time, he still had notes of one hundred and seventeen cases with whose personal and family history he was entirely familiar. These cases had all been treated upon this plan. Excluding the minor manifestations of syphilis, such as trifling mucous patches, occasional papular or squamous patches, etc., he found that among these persons there had occurred the following accidents which were fairly attributable to syphilis: four miscarriages, three of which were certainly due to syphilis, and one of which was doubtful; one case of perforation of the hard palate; one of epileptiform convulsions, and two of iritis; in one case the patient lost his penis from phagadenic ulceration supervening in a hard sore at the time of the secondary outbreak, but as he had gone on a long journey and neglected all treatment, this should not properly be set down in the list; not one of all the others had an eruption which betrayed him to his family or friends, and the great majority did not lose a day from their various occupations of business, pleasure, or professional work. In conclusion he said, that having had such results by the continuous plan of treatment, he had not thought it necessary to make any extended trial of the intermittent plan, and consequently could not speak from any large experience with it; nor did he think that, without further evidence upon the subject than he had yet heard, he would modify his present plan of treatment, though the intermittent plan had some distinguished advocates.

Dr. S. W. Gross thought that too much material had been presented for discussion, as there was enough to occupy four or five evenings; he would, therefore, limit his remarks to one or two points. In regard to the treatment of chancroid, he said he would have made about the same remarks as Dr. Ashhurst. He was in the habit of destroying the ulcer, with the triple object of preventing its increase, of preventing the auto-inoculability of the discharge, or the formation of

other sores in the immediate neighborhood of the primary lesion, and preventing the formation of a bubo. His practice was to touch the sore with pure carbolic acid for its anæsthetic effects, and follow this with nitric acid. A dry dressing, in the form of absorbent cotton or picked lint, was then applied, and continued after the slough had come away if the resulting sore was not large; otherwise he employed a mildly astringent wet dressing, say three drops of nitric acid to the ounce of thin mucilage, or two grains of tannin and one-eighth of a grain of sulphate of copper to the ounce of water, or three grains of chloral to the ounce, if the surface be sensitive.

With regard to iodoform, on which the preceding speakers placed great reliance, he had only to say that he had no faith whatever in its action. The device of Dr. White of wearing an iodoform rag on the finger is so well known in this city, that it deceives no one. In his wards at the Philadelphia Hospital, during his connection with that institution, he had invariably found that iodoform dressings retarded the process of cicatrization in simple as well as specific ulcers, the granulations being rarely larger than pin-points. For this reason, with a view to induce a healthy granulating process, he had treated all such ulcers, left by his predecessor, with the nitric acid lotion, with the best results. His own empirical observations in this direction are sustained by some histological peculiarities pointed out by a German experimenter, whose name had escaped him, in a recent number of *Virchow's Archiv*. The writer shows that iodoform prevents the formation of polynucleated epithelioid cells and giant cells in granulations, and in this way accounts for the good effects of the remedy in scrofulous and tubercular granulations. From these experiments we may fairly infer that the formation of the elements essential to the rapid repairs of other granulating surfaces is prevented by the use of iodoform.

In reference to the treatment of syphilis, he agreed with Dr. Ashhurst that it should be by mercury, but he did not employ the remedy in the primary stage, because he wished to know what course each case was going to take. If the advent of the symptoms was masked or retarded, no one could tell from a prognostic standpoint what might occur afterwards. It not unfrequently happens that a man says he was treated with mercury for the initial lesion some months before, that no general symptoms have developed, and asks whether he can marry. In such a case as this the treatment has delayed the appearance of the general symptoms, and the question can only be answered after several months of observation without any treatment whatever. For these reasons he withheld mercury in the primary stage. Before the appearance of general symptoms, he employed the blue pill where the protiodide did not agree. He was also in the habit, he said, of giving opium and tartar emetic to keep up the action of the skin, as the poison should, as far as possible, be eliminated in that way. He gave $\frac{1}{4}$ gr. of opium; $\frac{1}{10}$ gr. tart. emetic, and $\frac{1}{2}$ gr. of protiodide, or $1\frac{1}{2}$ gr. of blue mass, the dose being gradually increased until the tolerance of the patient was established. He thought that the mercurial treatment should be continued for months and months, with an occasional intermission, in

accordance with the rules established by Keyes and other syphilographers.

Dr. John V. Shoemaker said that the use of mercury by the mouth, as recommended by the speaker, would not answer in all cases. In some the alimentary canal will not tolerate the drug; particularly is it the case in debilitated and broken-down persons, who seek treatment in the various dispensaries and hospitals. In others, the mercury at times fails to make any impression, and in such instances, it often passes out of the body by the secretions. He recalled a case of secondary syphilis, in which he administered for several months, first the protiodide, and afterwards the corrosive chloride of mercury, both in small and large doses, without obtaining the least impression either from the drug or upon the lesions on the skin. In this instance he began later to treat the patient by the use of the corrosive chloride of mercury hypodermically, injecting one-tenth of a grain of the corrosive chloride of mercury, dissolved in water, deep into the subcutaneous-cellular tissue, and a cure followed within a few weeks. For the past three or four years he has followed, to a large extent, this plan of treatment with good results, and has never had any unpleasant symptoms follow mercury used in this way. If the needle is in a good condition, a gold one being preferable, and the operator inserts it deep into the cellular tissue, either in the superior or inferior scapular or sacral regions, abscesses will not follow. Dr. Shoemaker then illustrated, upon a patient having secondary syphilis, whom he had brought before the Society from the Philadelphia Hospital for Skin Diseases, the treatment of syphilis by the use of the corrosive chloride of mercury hypodermically. The eczematous condition of the skin, that sometimes follows the inunction method of treatment referred to by Dr. Ashhurst, can very often be avoided, by using, before the inunction of the mercury, a hot-air or steam bath. In treating patients in this manner at the Philadelphia Hospital for Skin Diseases, he always preceded the inunction with either one or the other form of a bath alluded to, and has caused the ointment to be better absorbed, and thus prevented the irritation to the skin. In the treatment of chancroid, he has used the oleate of zinc, dusted over the surface, with most decidedly good impression upon the parts. It has the quality of being odorless, and has a slight stimulating, as well as an astringent action.

(To be Continued.)

The Origin of the Word "Charlatan."

The *Asculapian* says:

It is generally admitted that the word "charlatan" is derived from the Italian word *Ciarlare*, to chatter, to prate. It appears that up to the sixteenth and seventeenth centuries the word was pronounced "chiarlatan." A German journal gives its etymology differently: a Paris physician, Latan, went through the town in a chariot containing his drugs, and in which he examined his patients. This caused the expression "Voilà le Char de Latan," which was subsequently corrupted into "charlatan."

EDITORIAL DEPARTMENT.

PERISCOPE.

Perineal and Penile Fistulæ: Scrotal Bisection.

In the *Brit. Med. Jour.*, February 23, 1884, Mr. Richard Davy says:

During the last year, I have operated on two most severe and obstinate instances of penile and perineal fistulæ; the results gained have been so satisfactory as to warrant me in directing your special attention to the surgical treatment of these miserable affections. I propose (1) to consider the subject of traumatic stricture of the urethra; (2) to briefly narrate the clinical facts; and (3) to offer some suggestions with regard to the operative treatment.

A man receives a severe blow on his perineum; hæmaturia or retention of urine follows; the acute symptoms subside; but the injury mechanically stamps that urethra with the origination of stricture; and slowly, but surely, the calibre of the urethra diminishes. The osseous arch of the pubes, and the tense, unyielding triangular ligament, favor the intensity of the blow by affording counter-resistance; and this is exemplified in some accidents by well-marked comminuted fracture of the subpubic arch, associated with rupture of the membranous portion of the urethra. Let me pass over the tedious interval (it may be months or years) between the date of the accident and the formation of the traumatic stricture, and state merely that this interval represents the period of its growth; the man complains of increasing difficulty of micturition, straining, incontinence, and loss of energy, during the time that his urethra is becoming smaller at the point, and larger on the vesical side of the stricture; his bladder is becoming generally hypertrophied; and his kidneys hyperæmic; in consequence of the ponding back of the urinary excretion. By reason of a persistent strain on an originally bruised urethra, the mucous membrane gives way, and nature relieves herself by establishing one or more fistulous tracks; these are the result of urine leaking through the damaged pipe, and setting up irritation in the perineal and penile districts, gradually showing this infiltration by great general uneasiness and concomitant abscesses. So soon, however, as the skin breaks, the urine gushes through, and the banks of the sinus become gristly and indurated; thus fortifying the adjacent structures from further extravasation.

But, at this stage, pray consider the man's misery; his bed-linen wet by night, his shirt and trousers by day; his groin, thighs and buttocks chafed; his never-ceasing consciousness of not being as other men are; his own smell, and that of his garments, nauseous to himself and repulsive to his neighbors! Would not any one of us feel life intolerable under these hard conditions? and would we not risk everything, and submit to anything that held out reasonable and welcome hope to such distress of mind and body? These patients have done so; and I will now, secondly, give you their short clinical histories.

Case 1. *Penile and Perineal Fistulæ: Traumatic*

Stricture of Urethra: External Urethrotomy and Bisection of the Scrotum: Recovery—J. O., aged 44, blacksmith, residing in Cornwall, married, was admitted into Mark ward, under my care, on October 19, 1882. He had been a healthy, strong man. In 1870, when shoeing a colt, he was kicked in the scrotum and perineum. Two weeks afterwards, he felt pain and urethral discomfort in micturition, and he noticed that his stream was diminishing in volume, and his propulsive power lessening; the act being accompanied by much straining, and occupying more and more of his time. These symptoms went on until 1879; when, after intense pain, two fistulæ opened anteriorly and posteriorly to his scrotum; the perineal fistula came first, and carried fully one-half of his urine. The penile fistula dribbled; and the natural channel conveyed about one-half *per meatus*. He was the subject of a right inguinal hernia, and had a patent left abdominal ring; both groins suffered severely from the straining, but the hernia was not originally caused by it. No instrument could be passed *per urethrum*. His condition was desperate; and he was sent to London, as a last resource, on the recommendation of his clergyman. On October 24, 1882, the man was placed under the influence of chloroform. A grooved director (almost straight) was passed down the urethra to the face of the stricture at the membranous part, and the knife was directed from the penile fistula, along the median line of the whole of the scrotum, until the director emerged at the perineal wound; the stricture was recognized and cut across, and a sound passed into the bladder from the perineum. On withdrawing the director from the meatus, a No. 12 retentive catheter was passed from the meatus out at the perineum, and again from the perineum into the bladder, so as to ensure that the newly-opened line was the channel occupied by the elastic instrument. This elastic instrument, or one like it, was retained in the bladder for nearly four weeks at a time, until January 9, 1883, when the patient was quite well; all fistulæ closed, no scrotal pain nor discomfort. No. 12 sound was passed along the whole urethral tube. He had perfect control of urine by day and night.

On January 16, 1883, he left Westminster to pursue his business in Cornwall as a blacksmith.

Case 2. *Stricture of Urethra: Traumatic; Scrotal Fistula and Infiltration: Bisection of the Scrotum and External Urethrotomy; Recovery*.—John L., aged 38, married, a chairmaker, was admitted into Mark Ward, under my care, on August 22, 1883. In 1868, he fell off a rick which he was thatching, and injured his perineum by falling on some wood. He did not pay any particular attention to the accident, and thought it would pass off; but, for the last six years, he had found much straining and inconvenience during micturition; and, in the early part of July, 1883, an abscess formed by his right erector penis muscle and scrotum, and was opened by Mr. Turner, of High Wycombe. Mr. Hayden also saw him, and performed suprapubic puncture of the bladder, and caused his urine to pass through a catheter for a fortnight by

the suprapubic aperture. As the urine persisted in traversing the scrotal fistula, he was sent to the Westminster Hospital. On August 27, I bisected the whole scrotum, and laid the stricture open freely, but with much care; passed No. 10 red elastic catheter from the meatus into the bladder, and retained it *in situ* for a fortnight. The fistula entirely closed, and the wound healed most kindly; he left the hospital on October 4, 1883, and passed the whole of the urine freely through its natural channel.

On October 27, 1883, I again saw the patient, and, in every respect, he was sound and quite well.

Let me now offer some practical observations on the subject of operative treatment in these loathsome cases. The first object of the surgeon must be to restore to its normal calibre the channel of the urethra, and maintain such dilatation. In some cases, notably those under the care of Mr. Barnard Holt, such dilatation of the stricture has sufficed also for the cure of the fistulæ. When I acted as Surgical Registrar to this hospital, I had many opportunities of seeing fistulæ close, on the renovation of the urethra by immediate dilatation. In the event of the fistulæ remaining intractable and patent (excluding the operation of perineal section or external urethrotomy), the best course to pursue is to divert the stream of urine temporarily from the fistulous track (*vide Surgical Lectures*, subject viii., pages 58 and 59, "On Puncture of the Bladder *per Rectum*"), either by suprapubic aspiration, or by puncture *per rectum*, or by opening the urethra somewhere on the vesical side of the stricture. I have tried them all, and have even taken pains to pump out the urine from the bladder for two or three days at a time, and to forbid any urine to be retained in the bladder, or to be expelled by involuntary spasm or change of posture. Some mechanical operation with this intention does certainly aid the chance of union, either with or without a plastic operation. Some of my cases have been very successful, others most annoying failures; and, had I my choice of only one operation for this class of cases, I should, from experience, choose "perineal section," and I will now lay before you my reasons for this preference.

1. The signal benefits gained from perineal and scrotal section in these two cases of stricture and fistulæ, respectively of twelve and fifteen years' duration from date of accident.

2. The reflections induced by watching how well and satisfactorily the wound for lithotomy unites in moderately healthy subjects, although no special means beyond care and cleanliness are adopted.

3. The free drainage granted right and left to the swampy tissues involved, and the marked softening and improvement of the glistly channels of urine. Moreover, by this simple but efficient free outlet, the maximum amount of rest is given to the divided stricture during micriturition.

4. The total absence of interference on the part of the surgeon during recovery, thereby economizing mental and physical suffering on the side of the patient.

5. No important structures are divided, so far as the scrotum is concerned, by strictly keeping

in the middle line (*vide Lancet*, May 20, 1882, Mr. Gould's case of Amputation of the Penis).

By this scrotal extension of the perineal section, originated by that grand surgeon, Syme, there are some cases, hitherto refractory, to be cured by our art. The operator challenges, in one continuous line, his patient's stubborn foes; and, by concentrated action, cuts his way through them all (fistulæ, sinuses, swamp, gristle, and stricture); and, quoting a parody which has been applied truthfully to allied conduct, he puts all his little troubles into one big one.

An Attempt at Suicide by Cardiac Transfixion.

The following case is recorded in the *Edinburgh Med. Jour.*, March, 1884:

The patient, C. S., was an elderly lady, in confinement in an asylum on account of her suicidal proclivities. For many years she had suffered intense and almost constant agony from neuralgia, and at a later period mental anxiety on account of domestic matters was superadded. Quite suddenly the neuralgia ceased to trouble her; but coincident with its disappearance, and replacing it, came the melancholia under which she now labors. She became dull, listless, and apathetic, and the one end and aim of her life seemed to be the termination of it by her own act. Probably she was under the influence of certain delusions even then, but she gave no distinct expression to them for many months—indeed, not till after the occurrence I report, and then only on a very few occasions. Her intelligence remained almost as clear as ever, and this rendered it all the more difficult to take sufficient precautions to prevent her accomplishing the object of her desires. Every effort was made to keep her at home, but several determined and very nearly successful attempts at suicide on her part while there induced her relatives to remove her to an asylum.

For some months after her admission she remained in very much the same state—was dull and listless, but very rational in her conversation and her letters. The close and careful watch kept on her prevented her actually attempting any injury to herself, but there was no reason to believe that the tendency was less strong than before. At last she saw her opportunity. Just after getting into bed she was observed to have become suddenly and violently ill, and medical aid was summoned at once. On its arrival she was found to be quite unconscious, very pale, skin cold and clammy, pupils widely dilated, but there was no conjugate deviation present; the features were drawn and altered, and the head was rolled rhythmically from side to side, patient moaning slightly at times. The radial pulse on the right side was very weak, that on the left almost imperceptible—rate, 78 per minute. The left arm and leg were quite paralyzed, so far as could be made out. The right arm was lifted and let fall feebly and aimlessly now and then. She had vomited a little, but no deleterious substance could be detected in the rejected matter by the rough examination possible at the time.

On palpation over the præcordia, the cause of this rather puzzling condition was discovered. A knob about the size of a large pea was felt adher-

ing to the chest-wall, in the situation of the apex beat, and this proved to be the head of a large steel shawl-pin, about $3\frac{3}{8}$ inches long, which the patient had succeeded in secreting, unobserved by the attendant in charge, and which she had thrust right into the chest, at the situation mentioned above, the part embedded being directed slightly upwards and inwards, and measuring about $2\frac{3}{4}$ inches. It was at once removed, and stimulants administered, and almost immediately the heart's action began to gain in force. The pulse became stronger and steadier, and consciousness slowly and gradually returned. For some time there was very urgent dyspnoea, and patient complained much of pain in the precordia, but these unfavorable symptoms diminished as time went on, and after an hour had passed she was much better: the paralysis of the left side had disappeared; the pulse was steady, and of fair strength—rate, 108 per minute; and she was quite conscious of what transpired around her. Four hours after the occurrence, she was sick again, and vomited a little; but this soon passed off, and she fell asleep, and slept at intervals during the rest of the night, stimulants being given frequently in small doses. On the following day she complained of some pain at the site of puncture, and of headache, but was otherwise pretty well, and her recovery after this proceeded without interruption. Some months have now elapsed, and no trace of the injury can be detected.

It appears to be practically certain that the pin transfixed the heart, probably at a point very near the apex of the organ. The elaborate analysis of cases of heart wounds in Holmes's *System of Surgery*, vol. ii., pp. 599–610, renders it unnecessary for me to do more than simply to refer to it for a *résumé* of the subject. Perhaps the case alluded to in that article, of the thrusting of a long gold needle into the heart, is the most similar to mine on record, but fortunately the issue here was very different. For the benefit of the curious in such cases, I may be permitted to refer to the ingenious Mrs. Aphra Behn's account, in *Oroonoko*, of the tigress which lived comfortably for many years with seven bullets of lead in her heart. After this, it is not surprising that the authoress should announce heart-wounds to be anything but necessarily fatal.

Perhaps the chief interest of the case recorded here is its bearing on Mr. Westbrook's proposal to aspirate the right auricle in cases of acute and intense pulmonary congestion, with over-distention of the right side of the heart. The part of the organ to be operated on is, of course, different from that involved in this experiment, but it is not quite clear that the results would be less serious; and even Mr. Westbrook appears to prefer to adopt the measure only in cases where all chance of recovery has disappeared. Perhaps other less heroic plans might obviate the disappearance of all chance of recovery. If not, it is doubtful whether it is worth while to torment the last hours of a patient who is already moribund. At any rate, I am convinced that my patient made a very narrow escape—so narrow that I cannot but think cardiocentesis out of the range of practical surgery.

The Micro-Organism of Purpura Hemorrhagica.

To the Pathological Society of London (*Lancet*, February 23, 1883), Mr. Watson Cheyne showed micro-organisms from two cases of purpura hemorrhagica. Dr. Russell's case was that of a girl, aged twelve years, who had a purpuric eruption with pain in the joints, epistaxis, and bleeding from the ear. The temperature was 104.6° on the morning of death. There were numerous ecchymoses in the skin, and hemorrhage into the pelvis of the right kidney. Sections of the heart showed extensive hemorrhage beneath the exocardium. The capillaries were plugged with small bacilli arranged in colonies—a few were isolated, the typical mode of grouping was evidently in colonies. The walls of the vessels were ruptured; there was no evidence of inflammation. The bacilli measured $\frac{1}{7000}$ in. in length and $\frac{1}{20000}$ in. in diameter. Spores or unstained roundish areas also existed in the rods. There was no peculiarity in the staining reactions. Methylene blue was the best dye. The distension of the wall of the capillaries seemed to show that the bacilli had been growing in the blood for some time. The probable cause of the hemorrhage was the plugging of the vessels with bacilli. Micro-photographs were shown. Dr. Pye-Smith's case was a boy, aged fourteen, who had one brother who bled much at the nose. The patient bled from a boil at first; afterwards there was constant bleeding from the gums, nose, and also into the conjunctiva. The temperature was 98° . After prolonged use of local styptics the bleeding ceased. The anæmia produced was intense, and the patient died. There was hemorrhage from an erosion of one small ulcer in the stomach. There were small subarachnoid hemorrhages. The testes, lungs, brain, skin, serous and mucous membranes were all affected. The lungs, tonsil, and heart were examined. The pulmonary alveoli were full of blood, and the vessels contained colonies of micro-organisms, the capillaries and some larger vessels were completely blocked with swarms of streptococci which exhibited a typical chain formation. These micrococci were $\frac{1}{7000}$ in. in diameter. There were no free micrococci. No inflammation and no necrotic layer were seen around the plugged vessels. Sections of the tonsils showed several of the vessels plugged with streptococci. The importance of the observation of two cases of idiopathic purpura hemorrhagica associated with the presence of micro-organisms was very great. These micro-organisms formed colonies, other kinds did not form vascular plugs (except the typhoid bacillus). The question whether there was an entrance of specific germs from without, or whether organisms had penetrated into the blood from the alimentary tract, was considered.

Dr. Pye-Smith referred to the fact that no change had yet been found in the blood-vessels of cases of purpura, though such change might be expected to exist.

Dr. Bernard O'Connor asked whether micro-organisms had been found in the blood.

Dr. Angel Money had not found micro-organisms in the blood in two cases he had examined.

Dr. Stephen Mackenzie said we ought not to come to the hasty conclusion that organisms were present in all cases of purpura; and Mr. Cheyne had exercised scientific caution in limiting his in-

ferences to his actual observations. There was no probability of any specific organism being engendered in cases of "iodic" purpura.

"Chloride of Methylene."

The *Brit. Med. Jour.*, April 12, 1884, tells us that MM. Regnaud and Villejean have published the results of two investigations into the nature and action of chloride of methylene, from which they have drawn several interesting conclusions. They set themselves, in the first place, to determine the relative constitution of the substance known as chloride of methylene in England, as compared with a standard specimen of chloride of methylene (CH_2Cl_2) prepared by themselves. The density of the former at 15°C . (59°F .), was found to be 1.363, and of the latter 1.334, which pointed to the probability that the English product was not exclusively composed of chloride of methylene. Further, the standard chloride of methylene boiled at a temperature of 40.4°C . (104.7°F .), while the other did not show any signs of ebullition until 53°C . (127.4°F .) was reached. At that temperature, most of the English substance passed over into the condenser, leaving a residuum which proved to be methyl alcohol. That part which passed over was found to be chloroform. The substance, therefore, known in this country as chloride of methylene is a mixture of methyl alcohol and chloroform, the proportions of each component being one part of the former to five of the latter. The second part of the research was devoted to a study of the physiological effects of chloroform (CHCl_3) and of chloride of methylene (CH_2Cl_2). It is unnecessary to make any remarks upon the action of the former substance, but the results of the inquiry regarding the latter are novel and interesting. From fifteen experiments upon dogs, the following picture is drawn as giving the typical sequence of phenomena. After half a minute of inhalation, agitation began with whining. After one minute and a half, there was dilatation of the pupils and nystagmus. After two minutes, the eye-reflexes were abolished, and general insensibility set in. In three minutes clonic movement of all the extremities and the tail set in. At four minutes inhalation was stopped and the dog set free. The clonic movements ceased. In six minutes the eye-reflexes returned; there was persistent contracture of the jaws. At seven minutes, there was an epileptiform attack. At eleven minutes the phenomena diminished in intensity: the animal tried to get up, but the paws seemed to be in the same condition as in strychnia poisoning. At twenty-two minutes, the jaws could not be opened; there was convergent strabismus. Up to about half an hour, the symptoms of intoxication gradually passed off, but, although the jaw could be opened, the animal could not raise its head, and paid no attention to its keeper's summons. These results prove that the substance known in this country as chloride of methylene has nothing in common with true chloride of methylene except the name; that the action of the English product is solely due to its contained chloroform; that the effects of true chloride of methylene are entirely different from those of chloroform; and, finally, that the action

of the former is so disturbing that it never can be used in surgical practice.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—In a reprint from the *American Practitioner*, Dr. W. O. Roberts, of Louisville, describes a knife-wound of the intestines, and in passing vindicates the right of Dr. S. D. Gross to the honor of first defining the proper treatment. His words are:

"What Dr. Gross suggested, now more than forty years ago, as applicable to extensive wounds of the gut, has, as is well known, recently been widened so as to embrace all penetrating injuries of the bowel, but the honor belonging to the entire procedure is now claimed by others.

"I submit that it belongs to Dr. Gross."

—The *American Journal of Ophthalmology*, vol. i., No. 1, starts out with an excellent assemblage of articles, and with fine paper and typography. It promises well for the future. Issued on the 15th of every month by J. H. Chambers & Co., St. Louis; editor, Dr. Adolf Alt. Price, \$2.50 per year.

BOOK NOTICES.

Elements of Modern Chemistry. By Adolphe Wurtz. Second American Edition. Translated by Wm. H. Greene, M. D. 8vo., pp. 770. Price, \$2.50. J. B. Lippincott & Co.

The success of this treatise in France, and the distinguished position held by the author, were sufficient reasons to anticipate a welcome by English-speaking students, and this has been fully realized.

In the present edition, important changes have been introduced in order to represent the modern views of chemical science. Of these we may mention a new classification of the metals in accordance with the present theories of atomicity; observations on the significance of chemical energy; an explanation of the remarkable law discovered by Mendeleeff by which the properties of bodies are shown to vary with their atomic weights according to the theory of periodic functions; and a number of other novelties. Extensive additions have also been made to the sections on organic chemistry. We have no doubt that the treatise will continue to be a favorite text-book with students, and it gives us pleasure to bring it prominently to their notice.

THE
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A WEEKLY JOURNAL,
ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D., } EDITORS.

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PARTURITION IN CENTRAL AFRICA.

From a most interesting paper on this subject by Mr. R. W. Felkin, in the *Edinburgh Medical Journal*, April, 1884, we can form some idea of how our semi-civilized neighbors in Central Africa pass through that period, which a false and enervating civilization has made so critical to the women of America.

In the Madi district, when a woman thinks that she is near the time of delivery, she abstains from meat, but eats a great deal of vegetable food. She cleans up her hut and sends her children away, and when labor commences she walks around the hut, while a friend places a deep layer of dry sand outside, a short distance from the door. The woman sits down, places her feet against stakes driven into the ground, and clasps her legs, while friends take turns in supporting her back, and in kneading and rubbing the abdomen. The cord is cut at about four inches from the child's body, by a stone knife, as a rule, but sometimes it is bitten. Should it bleed, the woman in charge takes the cord in her mouth and squeezes it between her teeth till all hemorrhage ceases; but it is never tied. The woman is not permitted to eat meat for a week or more after confinement; she suckles the child for two years, and has no connection with her husband for six months after its birth.

In the Bongo district an altogether different custom prevails. A branch of a tree is laid horizontally between two other trees, so that a woman can just grasp it firmly. When the pains come on, she seizes the branch, places her feet apart, and bears down; in the intervals she walks about. The mother and child both receive baths immediately after the completion of labor, the placenta being carried by a woman, who dances before the party, and throws it into the stream as far as possible.

Here, too, another custom is prevalent. A hole is dug in the ground, in which a fire is lit; on this fire a pot is placed, containing a decoction of herbs; the woman squats over this, and allows the steam to moisten and soften the passages. It is held in great repute for making labors easier.

He also notes that a like plan, other plants being used, is very generally adopted by Arab women, and natives married to Arabs, before coitus. It is said to contract the parts, and cause great desire.

Speaking of operative interference, he says :

"So far as I know, Uganda is the only country in Central Africa where abdominal section is practiced with the hope of saving both mother and child. The operation is performed by men, and is sometimes successful; at any rate, one case came under my observation in which both survived. It was performed in 1879, at Kahura. The patient was a fine, healthy-looking woman of about twenty years of age. This was her first pregnancy. I was not permitted to examine her, and only entered the hut just as the operation was about to begin. The woman lay upon an inclined bed, the head of which was placed against the side of the hut. She was liberally supplied with banana wine, and was in a state of semi-intoxication. She was perfectly naked. A band of mbugu or bark cloth fastened her thorax to the bed, another band of cloth fastened down her thighs, and a man held her ankles. Another man, standing on her right side, steadied her abdomen. The operator stood, as I entered the hut, on her left side, holding his knife aloft with his right hand, and muttering an incantation. This being done, he washed his hands and the patient's abdomen, first with banana wine and then with water. Then, having uttered a shrill cry, which was taken up by a small crowd assembled outside the hut, he proceeded to make a rapid cut in the middle line, commencing a little above the pubes, and ending just below the umbilicus. The whole abdominal wall and part of the uterine wall were severed by this incision, and the liquor amnii escaped; a few bleeding-points in the abdominal wall were touched with a red-hot iron by an assistant. The operator next rapidly finished the incision in the uterine wall; his assistant held the abdominal walls apart with both hands, and as soon as the uterine wall was divided he hooked it up also with two fingers. The child was next rapidly removed, and given to another assistant after the cord had been cut, and then the operator, dropping his knife, seized the contracting uterus with both hands and gave it a squeeze or two. He next put his right hand into the uterine cavity through the incision, and with two or three fingers dilated the cervix uteri from within outwards. He then cleared the uterus of clots and the placenta, which had by this time become detached,

removing it through the abdominal wound. His assistant endeavored, but not very successfully, to prevent the escape of the intestines through the wound. The red-hot iron was next used to check some further hemorrhage from the abdominal wound, but I noticed that it was very sparingly applied. All this time the chief 'surgeon' was keeping up firm pressure on the uterus, which he continued to do till it was firmly contracted. No sutures were put into the uterine wall. The assistant who had held the abdominal walls now slipped his hands to each extremity of the wound, and a porous grass mat was placed over the wound and secured there. The bands which fastened the woman down were cut, and she was gently turned to the edge of the bed, and then over into the arms of assistants, so that the fluid in the abdominal cavity could drain away on to the floor. She was then replaced in her former position, and the mat having been removed, the edges of the wound, *i. e.*, the peritoneum, were brought into close apposition, seven thin iron spikes, well polished, like acupuncture needles, being used for the purpose, and fastened by string made from bark cloth. A paste prepared by chewing two different roots and spitting the pulp into a bowl was then thickly plastered over the wound, a banana leaf warmed over the fire being placed on the top of that, and, finally, a firm bandage of mbugu cloth completed the operation.

"Until the pins were placed in position the patient had uttered no cry, and an hour after the operation she appeared to be quite comfortable. Her temperature, as far as I know, never rose above 99.6° F., except on the second night after the operation, when it was 101° F., her pulse being 108.

"The child was placed to the breast two hours after the operation, but for ten days the woman had a very scanty supply of milk, and the child was mostly suckled by a friend. The wound was dressed on the third morning, and one pin was then removed. Three more were removed on the fifth day, and the rest on the sixth. At each dressing fresh pulp was applied, and a little pus which had formed was removed by a sponge forced of pulp. A firm bandage was applied after each dressing. Eleven days after the operation the wound was entirely healed, and the woman seemed quite comfortable. The uterine discharge was healthy. This was all I saw of the case, as I left on the eleventh day. The child had a slight wound on the right shoulder; this was dressed with pulp, and healed in four days."

Mr. Felkin, rather contrary to have what we

been generally led to believe of these tribes, tells us that so far as he knows, labors are by no means so very easy in this part of the world, and are certainly not the painless, pleasurable affairs which some writers would have us believe. When a hard labor occurs and a woman remains a very long time undelivered, the aid of a man is called in. He, however, uses no instruments; and should he fail, *which, he was informed, hardly ever happens*, mother and child perish, for abdominal section is not in vogue here. He was unable to ascertain what means the man employs to assist delivery.

But the italicized words convey to us the idea that the act of parturition is very seldom a *fatal* act among the semi-barbarous natives of Central Africa.

CAPITAL PUNISHMENT.

There can be very little doubt in the mind of any thinking man, that capital punishment is but little better than a relic of barbarism. Experience seems to have demonstrated that the purpose for which it was instituted, that of deterring those contemplating murder from committing the crime, has not been realized; and the question of abolishing it altogether is being now seriously agitated in England.

When one man murders another he almost invariably does so, under the stimulus of passion that makes him for the time being well-nigh irresponsible (though we do not wish to be understood as advocating the much-abused plea of temporary insanity); some real or fancied wrong, or some benefit which he expects to derive from the death of his victim, so works upon his intellect that he is almost, if not quite, irresistibly urged on to the commission of the crime. Or it may be that the deed is motiveless, and in such instances we generally note that the intelligence of the murderer is but little, if any, above that of the brute creation.

On the other hand, when a man has been tried by a jury and convicted, the circumstances are vastly different. Here twelve men, presumably intelligent, and a judge who, on account of his acknowledged intelligence, has been elevated

above his fellow men, without the stimulus of passion, revenge, drunkenness, imbecility, or prospective gain, deliberately and calmly direct that another man (the sheriff's officer) shall kill the poor wretch before them. Does this not seem very much like judicial murder, rendered more repulsive from the absence of motive for the act? It is true that the law of the land calls upon these men to perform this dreadful duty: but is it not a barbarous law, that has no good reasons for its existence? Is not the London *Lancet* right when it speaks of "the pitiful and degrading spectacle of a great nation strangling its malefactors like so many dogs?"

Again, it has happened that circumstantial evidence has hanged innocent men, which is a possibility too horrible to be calmly contemplated.

Would it not be better to condemn murderers to imprisonment for life in such a well-built and well-guarded prison that escape would be impossible; to force each man therein to labor at that particular work which observation should have demonstrated to be the most uncongenial to him, and at certain intervals, say weekly or monthly, to march these criminals, heavily shackled and well guarded, through the streets of the city in which they are confined? By thus constantly reminding would-be murderers of the penalty of their crime, we imagine that a much more deterring effect would be realized, than by presenting to them the remote prospect of a tragic and exciting death, preceded by the mistaken, but very general sympathy of the public. To some miserable men the idea of a disgraceful death has no horrors; for to their hardened and brutal natures, *disgrace* is an incomprehensible word, while death, to their irreligious minds, brings but relief from a miserable and wretched life which they prize but lightly.

If, however, capital punishment is a necessity to collective civilized life (which, for the reasons already adduced, we very much doubt), can we not accomplish it in a less barbarous and revolting way than by strangling a man to death or breaking his neck?

That we can, and how to do so, will readily

suggest itself to our readers. We will only mention one plan which seems to us to partake less of barbarism than any other—the hypodermic injection of fatal doses of morphia.

Let us remember that vengeance belongs to a higher tribunal than any human court and jury, and that hanging does not *deter*, and that, therefore, the only two arguments that could be adduced for the perpetuation of this uncivilized procedure are robbed of their potency.

CHANCROIDS AND SYPHILIS.

We desire to call attention in an especial manner to the lecture on this subject, which forms the leading article in this week's issue, and to the able discussion which followed.

In view of the wide-spread evil influence of syphilis, both directly as *syphilis*, pure and genuine, and indirectly as the undoubted syphilitic influence upon all diseased conditions, with which every practitioner is familiar, there is no subject before the medical profession to-day that possesses more practical interest than the treatment of syphilis.

Dr. Ashhurst's admirable paper should be carefully read and re-read, as should also the opinions of those who discussed his paper; for they have all had immense experience with this disease, and are well calculated to teach us about it.

The two points upon which the greatest diversity of opinion seemed to exist, are points that will never be positively settled to the satisfaction of all, but will ever remain in dispute, being determined according to the opinion or experience of each individual physician. We refer to the excision of the chancre, and to the institution of immediate specific treatment.

The weight of recorded evidence seems to demonstrate that the excision of the chancre does not tend to prevent systemic infection, yet there are certain good authorities who still advocate it as a prophylactic measure.

The objection which Dr. White urges to the immediate specific treatment has more force from the side of the physician than from that of the patient.

mercury and iodide of potassium possess the

power of controlling the poison of syphilis after it has become manifest, it is but fair to infer that they also possess the power to throttle this poison in its incipency; and as we know that prevention is better than cure, would it not be better to counteract this poisonous influence before it has marshaled its forces to make a savage onslaught on the system?

It is true that by so doing we, in some cases, would never know whether the man would have had syphilis or not; but what difference does this make, if he *does not have it*? As far as losing our guiding point in reference to marriage, there is not so much force in this argument; for if a man comes to us with a primary sore that would make syphilis a dim presumption even, prudence would dictate to us to advise against immediate marriage; and if we institute a course of specific treatment, which, as the speaker says, may *mask* the disease, we can, after the system has become impressed with the drugs, discontinue the treatment, remove the mask, and allow the disease to become manifest, if it has not been controlled or eradicated by the treatment.

The point that strikes us most forcibly is, that we cannot *wait* for developments when we have to deal with such a terrible disease as syphilis.

NOTES AND COMMENTS.

Hot-water Injections in Gonorrhœa.

Dr. S. C. Gordon has had most excellent results from a method of treatment which he thus describes in the *New York Med. Jour.*, April 19, 1884:

I filled a fountain-syringe with a quart of water at a temperature of about 100° F., and, with one of the small tubes introduced into the urethra as high as I could push it, I injected it and allowed it to run back into a vessel. It ran back by the side of the tube, washing the urethra as far as it was thrown up. The first trial acting as a sedative, or at all events giving no pain, I filled the fountain again, this time increasing the temperature about 10°. I found that, by asking the patient to strain a little as if urinating, the urethra could be sufficiently dilated to allow the water to pass into the bladder, and in that way I filled and

refilled the bladder several times, allowing him to pass it off himself each time. The relief afforded by this second injection was immense, and from that moment the dysuria ceased to be an element of much trouble.

This douching I continued twice each day, and in three days I had the pleasure of seeing my patient practically relieved of *all the unpleasant symptoms*. A very slight discharge remained, but a repetition of the same treatment for a few days more completed the cure. From the first day of the injections no anodyne was needed, and no medicine was given. The chordee was relieved, the burning sensation removed, and the patient happy.

In conclusion, he says: "I can give only a brief summary of the cases in which I should expect the most satisfactory results from this mode of treatment:

"1. I should hope, and confidently expect, to abort, in from three to five days, a large majority of cases that were treated as soon as the first well-known symptoms appeared. In these cases I use the injection as *hot as it can possibly be borne*—three or four times in twenty-four hours; at least two quarts should be used at each time.

"2. In cases of ten days' or two weeks' duration (at which time the inflammatory process has ended), I believe the most of the trouble can be relieved in a very few days. The suffering so characteristic of that stage will usually pass away in twenty-four hours. In many of these cases I have been enabled to force the water into the bladder, and then allow the patient to pass it away immediately. This has a good effect upon the dysuria, relieving it almost at once. In this class of cases, also, the water should be very hot.

"3. When two or three days have elapsed before the patient is seen, I do not expect so much as in the former classes. Even here much may be done by the external use of very hot water and the careful, gentle use of the fountain-syringe, filled with *simple warm water*, at about the temperature of the body, or less. This promotes cleanliness, and is a sedative.

"I would add that my three years' experience fully justifies me in commending this plan to the attention of the profession."

Two New Cardiac Poisons.

The *N. Y. Med. Jour.*, April 5, 1884, says:

Woorari seems in danger of being outdone as a cardiac poison, if we may judge from the accounts lately given before the Paris *Société de Biologie* of

two new Oriental arrow-poisons. A specimen of one of these poisons was presented by M. Rochefontaine, as we learn from a report of the meeting published in the *Progrès Médical*. It was said of this poison that an animal of medium size, wounded with an arrow the point of which had been imbued with it, would make one bound, and then fall dead; and that even an elephant would succumb after running no more than a kilometre. The composition of the poison is not known, being kept a dead secret by the Mois, from whom it was only by subterfuge that the specimen shown at the meeting was obtained. Taken into the stomach, the substance is said to be innocuous. One milligramme injected under the skin of a frog produced death within ten minutes, the heart being arrested in systole, and the reflexes persisting for a time. One of the speakers gave it as his opinion that the poison was probably obtained from the *Upas antiar*.

The other substance, shown by M. Laborde, was termed elephant poison (*poison d'éléphant*), and came from Borneo, where the inhabitants employ it for poisoning their arrows. Experiments on dogs have shown that this substance also kills by arresting the heart's action, but whether in systole or in diastole we are not told.

Two new poisons, then, are before the profession for investigation, and this will have to be directed both to their constitution and their physiological actions. But it must be confessed that the prospect of any notable advantage accruing to therapeutics from such research is remote, while the difficulty of obtaining the substance first mentioned stands in the way of the extended series of experiments necessary before precise conclusions can be arrived at.

The Correction of Deformities by Modifications of the Thickness of the Sole of the Shoe.

Before the New York County Med. Ass. (*Med. News*, April 5, 1884), Dr. William Detmold made some remarks, illustrated by diagrams on the blackboard, on the correction of certain deformities in the young by the simple device of thickening the inside or the outside edge of the sole of the shoe, as required. In weak ankles, which were exceedingly common among girls, owing to the breadth of the pelvis, which gave a tendency towards knock-knee, there was always a protrusion of the internal malleolus. This was ordinarily treated by placing a certain amount of stiffening on the inner side of the shoe, and, this failing, by the use of iron splints. The simplest and best way of correcting the deformity, however, was by

making the inner side of the sole thicker than the outer, which had the effect of lifting the weight off of that portion of the skeleton. The same method answered for the correction of knock-knee, but when the child was bow-legged, the thickening was to be placed on the outer instead of the inner side of the sole. If one leg was shorter than the other, there would inevitably result more or less tilting of the pelvis; which had the effect in time of producing lateral curvature of the spine, with its secondary or compensating curvature. This could easily be remedied, when taken in time, by making the sole of the shoe for the foot of the shorter limb sufficiently thick to bring the transverse axis of the pelvis at right-angles to the lower extremities. Dr. Detmold also explained his method of treating flat-foot (which was common in young girls who were poorly nourished and who were obliged to remain in a standing position much of the time), as well as elevation of one shoulder above the other. In five out of every nine young girls, he thought, the right shoulder was a little higher than the left.

Malignant Pustule.

Though comparatively rare, yet this is a most formidable disease, and we should be always ready to energetically combat it. Dr. Wm. S. Janney recently reported some cases before the Philadelphia County Medical Society, and now Dr. A. C. Griffin publishes a case in the *N. Y. Med. Jour.*, April 12, 1884. It was clearly traced to the bite of a fly received in a restaurant.

On making inquiries about the restaurant, it was found that the employees had been in the habit of throwing waste scraps of meat and other refuse into a back yard. This practice having been complained of, it was stopped, by an order from the Board of Health, and for several days afterward the flies swarmed about the restaurant, annoying all by their savageness. So far as could be learned, this was the only person of those exposed whose physical state was in a condition susceptible to the inoculation of septic material, which was undoubtedly conveyed to the blood of this patient by the bite. The fly, which was a common green-bottle or carrion fly, was killed on his cheek by a friend who was dining with him. The fly had bitten sufficiently to draw blood, and it was from this point as a focus that the malignant pustule began its career. That it was a malignant pustule the clinical evidence fully bore out.

He believes that the proper treatment in cases

of septic inoculation or malignant pustule lies in the prompt and thorough excision or cauterization of the point of inoculation, endeavoring by these means to prevent the growth and proliferation of the morbid elements, and thus check the absorption of those materials which would contaminate the whole system.

As for general treatment, stimulation should be carried to its fullest extent, and the best of the stimulants will be found to be alcohol. Quinine should be given in large doses to obtain its antipyretic as well as its antiseptic effects. Opium should be administered in quantities sufficient to quiet pain and allay nervousness. The bowels should be kept open by laxatives or mild cathartics. Poultices also seem to give some relief, especially when to them is added some sedative, as tincture of opium.

The Treatment of Scalp Wounds.

In view of the danger of causing erysipelas, inflammation, or suppuration, when the ordinary sutures are used for scalp wounds, we hail with pleasure the suggestion made by a correspondent of the *Lancet* (April 5, 1884), which, while not very new, is yet worthy of repetition:

The scalp is remarkable for the looseness with which it is attached to the subjacent bone, and in simple cuts through the scalp blood and serum can readily force a way between the scalp and the bone, and the accumulation induce suppuration. Still more frequently the scalp is torn away from the skull in a longer or shorter flap, and then, if the edges of the wound are united, the serum effused from the under surface of the detached flap is confined beneath it, and suppuration occurs. If this fact be neglected, suturing scalp wounds is a dangerous step; but if it be recognized and acted upon, the sutures are altogether devoid of danger. The main thing in the treatment of any flap scalp wound, however slight the flap may be, is to secure primary adhesion of the flap to the subjacent pericranium and completely prevent accumulation of serum beneath it. This must be secured by properly-adjusted pressure; and, in view of this primary indication, but secondary importance should be attached to the rapid healing of the edges of the wound. If a good bunch of hair be taken up on each side of the wound, and twisted, and then used as a suture, it is obvious that the whole surface of the scalp from which the hair springs is held compressed against the subjacent skull; and hence this form of suture skillfully employed really fulfils the indications of treatment very well. It is an error to suppose that the tissue of

the scalp is more intolerant of the presence of a suture than the skin of any other part of the body.

The Incubation of Measles.

Dr. Blenkarne thus writes to the *Brit. Med. Jour.*, April 5, 1884:

Six or seven months ago, J. H., aged about twenty, residing in a neighboring village, where there was not at the time (nor had been for a long time previously) a single case of measles, traveled by train to Brackley, a distance of about eight miles. On looking around the carriage, she found among her fellow-passengers a woman with some children—one, an infant in arms, which had a very red face. On getting into conversation with the mother, she discovered, to her horror (being of somewhat nervous temperament), that the said infant "had 'fell' with the measles" (*alias*, the rash had come out) at Bletchley Junction, *i. e.*, about half an hour before my patient entered the carriage—the other children having recently recovered from the same disorder. Just a fortnight afterwards J. H. returned home, feeling on that day "out of sorts," with coryza, and sent for me the following morning, when I found her with the rash well out all over her face, neck, and shoulders. The complaint ran a mild course. A fortnight exactly after this, her youngest sister (who had not seen her for some time until her return home) caught the infection; the general feeling of *malaise*, etc., occurring on one day, and coming out very freely the day following. In this second case the complaint also ran a mild course, and no other case has occurred in the village up to the present date (March, 1884).

Syphilis and Locomotor Ataxia.

Dr. Leonard Weber thus concludes a paper in the *Med. Record*, April 5, 1884:

First.—There is not sufficient evidence to show that syphilis may be the direct cause of the typical form of locomotor ataxia, *i. e.*, posterior sclerosis of the cord.

Second.—There is proof, and plenty of it, that syphilis produces certain lesions in the cord and its meninges as readily, if not as frequently, as in the brain. These lesions may be, and often are, followed by symptoms of (atypical) tabes. They are generally relieved by prompt and energetic specific treatment, but rarely cured.

Third.—Experience has shown me that the tendency of the syphilitic virus to produce lesions in the nerve-centres occurs the sooner, the less its action is interfered with by judicious and pro-

longed treatment, although old cases of syphilis are, *ceteris paribus*, more apt to develop symptoms of neurosis than those of more recent date.

Fourth.—As it has been shown by all observers that syphilitic lesions of the central nervous system once established are seldom really cured by specific remedies, we have additional reason to insist upon timely and long-continued treatment. It is also our duty to impart such information of the nature of the disease to the patient as will lead him to keep a strict and judicious watch over himself, and have suspicious symptoms attended to as early as possible.

Fifth.—I believe a properly graded inunction-cure with unguentum hydrargyri in most cases of syphilis to be the best means of reducing the disease to early and harmless latency.

Traumatic Rupture of the Trachea.

To the New York Surgical Society (March 11, 1884), Dr. J. L. Little presented a trachea removed from a man sixty years of age who died in St. Vincent's Hospital, having been struck in the neck and upper part of the sternum by one of the shafts of a truck. When he first saw the case, five hours after the injury, he found the patient emphysematous from the head to the lower part of the abdomen. There was considerable ecchymosis over the sternum. No difficulty in breathing. No cough or pain on pressure over the upper part of the sternum and trachea. Had had slight expectoration of blood before entering the hospital. The emphysema was greater over the chest than elsewhere, and less about the neck. Injury of the trachea was suspected. The patient was anesthetized, and a careful examination was made over the trachea and larynx. But no injury of these parts could be detected, and, as there were no symptoms of suffocation, it was thought best not to perform tracheotomy. He, however, gradually sank, and died this morning, sixty hours after the injury. There was considerable cyanosis during the last twelve hours, but no symptoms of suffocation.

The autopsy showed a complete separation of the fourth and fifth rings of the trachea, with signs of recent inflammation and hemorrhage in the surrounding tissues. Double hypostatic pneumonia and pleurisy also existed.

Congenital Absence of Femur.

To the Pathological Society of London (March 18, 1884), Mr. Roger Williams showed photographs of a boy, in whom the femora were absent. No trace of the femur or patella could be found on

careful examination on either side; a bony mass in the groin, and apparently articulating with the pelvis, was ascertained to be the head of the tibia somewhat altered. Mr. John Wood said that about twenty years ago, a man who went by the name of the man-monkey was well known in London; the femora were absent, but he was exceedingly agile, and this, combined with the fact that his hands reached to the ground, had earned him his soubriquet. He thought that one moral might be drawn from such cases, and that was how exceedingly useful one section of a limb might be; it was, he thought, an argument in favor of the operation of excision.

SPECIAL REPORT.

OPHTHALMOLOGY.—NO. XVII.

BY C. S. TURNBULL, M. D.,

Oculist to the German Hospital, Philadelphia.

Transactions of the American Ophthalmological Society.

Nineteenth Annual Meeting, Catskill Mountains, 1883. Published by the Society.

Thirty-eight members were present. Dr. H. D. Noyes, of New York, was elected President, and Dr. W. F. Norris, of Philadelphia, Vice President, and the Society adjourned to meet at the Catskill Mountains, July, 1884.

Twenty-seven papers were presented, as follows, and the amount of interesting material presented serves but to illustrate the interest and energy of this body of working specialists.

Dr. H. Derby, of New York, presented a paper on the "*Influence on the Refraction of Four Years of College Life.*"

So far as his figures go, they tend to show, first, the large amount of myopia, even in this country, among the educated classes. Dr. Loring's combined table of observations, made on the eyes of scholars up to the age of 21, in various countries, gives the German percentage of myopia as 62.10, the Russians 42.8, and the American 26.79. Derby's investigations gave him, among 443 freshmen at Harvard, and Amherst, a myopic percentage of 34; at graduation at Amherst, a percentage of 47.2. It is difficult, however, says D., to compare Dr. Loring's figures with my own, as his statistics were based on observations made between the ages of 6 and 21, and mine between 18 and 23. But all researches made at this latter age go to prove that, at least, or very nearly, one-half of the educated community is myopic, in this as well as other countries.

Moreover, contrary to the impression so long

entertained, myopia may be acquired at, or near, the twentieth year, from the same causes that produce it at an earlier age, and may continue to progress until the course of study is completed.

2. "*Some Improvements in Instruments and Appliances for Cataract Operations.*" By Russell Murdoch, M. D., of Baltimore.

3. "*A Case of Tubercle of the Iris.*" By H. S. Schell, M. D., of Philadelphia.

"The patient, a schoolboy, nine years of age, applied for treatment at Wills' Eye Hospital on August 29, 1881. The eye had been painful for four days, and exhibited the usual signs of ordinary plastic iritis. Treatment was of no avail, and on the following October he was admitted to the Children's Hospital, suffering from well-marked symptoms of coxalgia in the second stage. There was a distinct history of phthisis on the mother's side. The eye was still somewhat painful. There was a ring of circumcorneal injection, the pupil was immovable, the fibres of the iris atrophied, and projecting from the nasal side of the pupillary margin was a small yellowish-white nodule, the size of a pin's head, and tinged with pink. This nodule gradually increased in size. Vision was completely lost in December, and in May, 1882, the anterior chamber was nearly filled with the new growth. The nodule was of a yellowish tinge, and a few minute blood-vessels could be seen upon its surface. At this time the intra-ocular tension was increased, and the eye was tender on pressure, but not otherwise painful. (An accompanying colored lithograph represented the external appearances quite accurately.) In the meantime an abscess had formed on the outer side of the thigh. It was aspirated by Dr. Ashhurst, and twenty-four ounces of pus withdrawn. The abscess rapidly refilled, and opened spontaneously at the point of puncture a week later. A diagnosis of tubercle of the iris was made, and on May 30th I enucleated the eye, with the hope of preventing the extension of the disease. Healing progressed without obvious incident. The discharge from the thigh gradually decreased, ceased in July, and the boy was discharged from the hospital in September with very good movement of the hip, and but slight shortening. The excised eye was placed in Müller's fluid, and a microscopic section subsequently examined by Dr. Geo. B. Laurason, of New Orleans. He reports that the specimen shows two or three tubercular masses imbedded in a mass of organized inflammatory product. There is one small round tubercle in the left ciliary region, and in front of the iris an oblong tubercular mass is seen,

containing three or four plugged-up blood vessels. The tubercles seem to have developed in the organized inflammatory product, which nearly fills the anterior and posterior chambers."

4. Also, *A Case of Tuberculosis of the Ciliary Body and Iris*. By O. F. Wadsworth, M. D., Boston. Child aged three and a half, was sent to me by Dr. H. Derby for consultation, on October 24th, 1882. Dr. Derby wrote: "I first saw this eye October 4th. The process had then lasted two weeks. It seemed to be a kerato-iritis, as well as I could make out. The question was as to glioma or irido-choroiditis. The father stated that both he and the mother were in good health; and there were two children older and two younger than this one, the oldest seven years, all well. 'Never a doctor in the house with any of them.' These statements as to the health of the family were found later to be quite incorrect. I found, as had Dr. Derby, that it was very difficult to obtain a view of the eye. Even when the patient was held and the lids forcibly opened, the rolling up of the eye and the great flow of tears prevented a satisfactory inspection. The lids were natural; the cornea hazy; the conjunctiva of the bulb moderately congested, but no very marked ciliary congestion; the anterior chamber of good depth; pupil moderately dilated; the upper portion of the iris apparently thickly set with vessels; a yellowish reflex from the pupil. My diagnosis wavered between glioma and irido-choroiditis, as I suggested to Dr. Derby the advisability of an examination under ether before advising enucleation. Both Dr. Derby and I believed the growth to be a glioma. The eye was enucleated the same day by Dr. Derby, placed in Müller's fluid, and given to me for examination. Microscopic examination showed the greater part of the solid mass to be mainly made up of granulation tissue, varying in different parts, here containing closely-packed small cells, there mostly consisting of fibres running approximately parallel—the latter most numerous at and near the anterior border, and now and again broad bundles of the fibres curved forward to the posterior surface of the cornea. Through the mass ran large vessels, and there were remains of many hemorrhages. The pigment, irregularly scattered, was for the most part all that could be made out as remainder of the normal tissues of iris or ciliary body. Throughout this tissue, except in the more fibrous portions, were scattered rounded agglomerations of cells, more deeply stained by hæmatoxylin, and showing the characteristic cell-forms and arrangement of tubercle; giant cells containing many nuclei, surrounded by epithelioid and

small granulation cells. The posterior layer of the mass was much more free from cells, and appeared to consist of the infiltrated and thickened remains of the vitreous. In this was seen also, in the sections, the collapsed and folded lens capsule, lined here and there for a short distance by what seemed to be its degenerated epithelium, and containing apparently some debris of lens fibres. One-half of the globe was given to Dr. H. C. Ernst, then engaged in the investigation of the bacillus of Koch, and although the fact that the eye had been in Müller's fluid made the search more difficult, he was able to demonstrate satisfactorily the presence of the bacillus in the specimen. Until the result of the microscopic examination was reached, there had been no suspicion of the tuberculous nature of the disease. This was the first case of the kind either Dr. Derby or I had seen, and the family history, as given by the parents, gave no indication that such disease was at all likely. Indeed, looking back now, with the knowledge of the true nature of the case before me, I am unable to recognize anything in the visible appearances of the growth when I saw it, or in the history of its course, by which it could be distinguished from a glioma, unless, perhaps, the great vascularity of the iris which preceded the development of the growth into the anterior chamber may be regarded as of some value for the differential diagnosis.

The statement that the child herself and the whole family had been free from anything pointing to tubercle, made the case one of much interest to follow. The child continued in apparently good health for more than five months after the enucleation; then for five or six weeks she complained of headache, not enough to lead the parents to call a physician; suddenly became worse, and Dr. Ferguson, who was called, found her in convulsions. She died three days later, with the diagnosis by Dr. Ferguson of tubercular meningitis. There was no autopsy. It was only some time after her death that I learned from Dr. Ferguson that he had attended the family for several years, that the child's father and brother of the father had phthisis, and that the children had been subject to bronchial attacks."

5. *A Personal Experience with Prismatic Glasses*. By S. F. McFarland, M. D., Oxford, N. Y., who says: "Opinions are so various in regard to the efficiency of prismatic glasses in correcting or alleviating the distressing annoyances resulting from muscular pareses, that he gives a brief statement of long personal experience in the use of them." (Pareses of the ocular muscles are, as a rule, too

carelessly noticed, and carefully-adjusted prisms prove a boon to many an aching head. Especially is this the case in near-sighted people. In such, the centering of the glasses is everything as regards the comfort and ease of fit, and opticians cannot be too carefully watched in the adjusting of frames. There should really be a special de-centering as carefully ordered as the glasses the oculist may prescribe, because of the frequent occurrence of pareses, as well as peculiar conformation of the orbits.)

6. *On the Apparent Curvature of Surface Produced by Prisms.* By O. F. Wadsworth, Boston.

7. *A Case of Sympathetic Neuro-retinitis.* By James A. Spalding, M. D., Portland, Me.—“the peculiar point of interest being that contrary to the opinion expressed by Mauthner, who ‘would not like to enucleate in a case of sympathetic neuro-retinitis,’ the right eye was enucleated to relieve the pain from which the patient was suffering. The operation was followed by excessive hemorrhage, which could not be checked by pressure or hot water, and only ceased after ligature of one artery deep in the orbit, and of a second which appeared to spring from the band of connective-tissue uniting the globe and upper eyelid. The case now proceeded favorably, and the patient was sent home in ten days with the vacant orbit in a promising condition. Owing to my desire to see what influence the enucleation of its fellow would have upon the better eye, I abstained from all medical treatment. The result appeared to justify my opinion of the truly sympathetic nature of the neuro-retinitis, for sight gradually returned to the remaining eye. The pain in the head disappeared with considerable rapidity.

“Three months later, he saw the patient again, and examined her with the ophthalmoscope. Left eye normal, pupil active, media transparent, retina and optic papilla normal; the only abnormality consists in the presence of slight tortuosity of the same vein, which was previously mentioned as projecting into the vitreous. Vision $\frac{2}{30}$ and Snellen $1\frac{1}{2}$ with ease, with convex 16 (2, 5, D.).”

8. *Report of Thirty-five Cases of Cataract Extraction.* By David Webster, M. D., New York.

9. *Notes on Ocular Therapeutics.* By W. W. Seely, M. D., Cincinnati, O.

“The first point I desire to notice is in the use of the yellow oxide of mercury in external ocular troubles. Probably every one has found the use of this remedy, whether in corneal or conjunctival diseases, like calomel in the past, often attended with pain. This often-recurring fact and

disadvantage led me some time ago to institute some investigations in regard to the cause or causes.

“So far as regards the strength of the preparation, I have found that ten grains to the ounce of the vehicle is the best for all purposes. When I began to inquire into the mode of action of the yellow oxide, I found that this preparation was regarded chemically as an insoluble substance. My theory in regard to its action at first was, copying from the supposed action of calomel, that a chemical change occurred; but finding that it was an insoluble substance, and hence inert, this explanation seemed to fail.

“I took a large number of specimens and had them analyzed, and found that all the so-called ‘chemically pure’ preparations contained more or less bichloride, and the inference from this was that its action depended on this residuum in its manufacture.

“My assistant, Dr. Caldwell, has lately been working at the subject, and is satisfied that there is a certain amount of solubility in the yellow oxide, to what degree tests have not decided.

“One point seems settled—that the less bichloride a preparation contains, the less the pain produced by the salve, efficiency remaining the same.

“I desire to add one more practical point in the use of the yellow oxide and vaseline, as devised by myself some years ago, in conjunctival affections. Those who have used this combination have doubtless found that in cases where there is a profusion of tears the salve is so quickly washed out that little or no benefit results. In such cases I substitute eserine or the bichloride in solution to contract the blood-vessels. The strength of the bichloride solution that seems to answer every purpose, is one part to seven or eight thousand (one grain to sixteen ounces water), or about one-third the strength preventive of the growth of the bacteria of ordinary decomposition.

“Such a solution, entirely painless, has often, in my hands, set aside an acute catarrhal conjunctivitis of violent type, after one to three or four thorough drenchings of the conjunctiva.

“This is the strength I have used for a long time as an antiseptic in various operations.

“I merely state this to introduce a point I regard of great practical importance. In my hands, one thorough application of a four-grain solution once a day acts altogether better than more frequent applications, either of the same solution, or of weaker ones. This remark applies to all classes of cases.

“One point more in regard to eserine. For the

reduction of intra-ocular tension, eserine has for me entirely done away with paracentesis, and for so long a time and so completely that this procedure has really only an historical interest."

(To be Continued.)

CORRESPONDENCE.

On Blood-letting as a Specialty.

EDS. MED. AND SURG. REPORTER:—

I have been reading Dr. Corson's recent articles in your journal in regard to blood-letting in the young and old, and in that connection I have referred to some old files of the REPORTER, as I frequently do, and I noticed several well-written articles on the subject of blood letting in pneumonia, but none that seemed to me to be of so much practical importance, or so little tinged with self-laudation, as the one from the pen of Dr. W. G. Bronson, of New Canaan, Conn.

The communication from Dr. Bronson has the true ring, certainly; and I have no doubt it met with a hearty amen from those of the profession who are not wedded to hobbies of their own. I have always read everything from the pen of Dr. Corson with interest, for he writes vigorously and well, and his half century and more of practice is more than the vast majority of physicians attain to.

I well remember his communication some years ago in regard to the ice treatment in scarlet fever; then a few years later one on the use of the forceps in labor; then followed an article on the use of the lancet in pneumonia, with the one above mentioned on bleeding in the young and old.

Being young in the profession when the first article appeared, I eagerly imbibed the idea there set forth, that no child would or could die with scarlet fever when ice was used. I felt myself able to cope with the dread disease in any form. But alas! how many times since have I seen the darlings of many a family ruthlessly cut down, in spite of ice and everything else that could be tried. If Dr. Corson has ever passed through an epidemic of scarlet fever such as I have several times—and he certainly has—he must have seen times when the hand of death was upon the little sufferer from the very first moment; when ice nor veratrum, nor quinine nor stimulants, delayed for the briefest period the monster.

How idle and ridiculous it seems, then, for any one, even with Dr. Corson's experience, to claim that any particular treatment will cure every case. Since I have been a subscriber to your journal, a great many specifics have been proclaimed by different parties for diphtheria, but when tried on a malignant case, had no effect at all. I have recently had several cases of pneumonia, one of which was a regular "typical case," such as is mentioned by Dr. Corson, in his communication several years ago. But, strange as it may seem, although the patient presented the identical symptoms mentioned by Dr. C., I did not bleed, for I did not consider it necessary. Blisters, opiates, veratrum—which Dr. C. con-

demns so much—stimulants and good food, brought the patient around nicely, along with other "typical cases" under same plan of treatment.

Do not understand me as condemning the lancet. Far from it. It should be used like any other powerful remedy—whenever it is necessary—but only when, in the opinion of a fair-minded physician, it is the best thing to do. I am opposed to indiscriminate bleeding by inexperienced persons.

A young practitioner, reading Dr. Corson's communication, would think nothing more was required than a good bleeding; and failing to diagnose correctly, would use the lancet without judgment, or reason, or necessity. Dr. Bronson well says, that the gravity of pneumonia depends, largely, on its character, age, etc., and that a great many will recover without any treatment. We all know that to be true; and we know equally well that some will die, no matter how much they are bled, as Dr. B.'s two cases did; and it would seem hardly possible for Dr. Corson not to have lost some of his patients, even after he had taken a pint or so of blood from them, although he does not mention any such loss. However, when I began this communication, I intended to say something about bleeding in the young and old, *in re* Dr. Corson's recent articles on those subjects.

It is barely possible that in certain conditions of new-born children, bleeding would be called for; but, in a practice of twenty years, I can not think of a single instance in which I have the slightest idea that a child could have been saved by that means. Suppose, taking any one of Dr. C.'s "typical cases," in which he considered blood-letting necessary, he would have plunged the child into a warm bath, with other appropriate and suggestive treatment, would not the result have proven just as satisfactory? What possible benefit can be derived from taking blood from a child, with any and every infantile ailment, as Dr. C. evidently teaches, is more than I can understand. There are cases, certainly, when it would be beneficial; but since the wisest of our profession do not pretend to be able, at all times, to tell what ails a child, how are we to know when to bleed? Indiscriminate bleeding here would surely be more reprehensible than in adults.

In all the cases presented by Dr. C., after a careful reading, I can find nothing in the result to advocate the utility of it. Notably in the case of stramonium poisoning, while virtually admitting that it did no good, he says it did no harm. That seems to be begging the question, it is the *good* he is after, else where is the necessity of bleeding at all?

Dr. C. has a long article on blood-letting in the old, and presents quite a number of "typical cases." When you read of one, you have a sample of the whole—some, of course, being spare and thin, others stout, all feeling about the same way—dull, languid, headache, etc. I except, of course, any who may have presented apoplectic symptoms, in which case bleeding is always eminently proper. All these old people had been in the habit, doubtless, of being bled every spring, most likely some of them in the fall too, and blood-letting was the sovereign balm for all their ills. Allow me to say right here, that in the good old days of blood-letting in the community in

which I practice, here and there an old man in the country had his lancet, and all the old folks got bled spring and fall as regularly and punctually as they sheared their sheep or pulled their beans. I can, at random, select any old person, and ten to one, if he or she is over sixty years of age, there will be so many cicatrices in the region of the median cephalic vein that an experienced bleeder like Dr. C. could hardly find a place for his lancet. My father and mother were both believers in, and practitioners of, this useless habit; and I well remember how frequently, in my younger days, the lancet would be called into requisition, sometimes by an old doctor in the neighborhood, but oftener by any old farmer who happened to have a good one. My mother's arms, at the bend of the elbow, were both actually so cut and hacked by the lancet that I think it would have been impossible to bleed her from either arm. My father's were not quite so bad. Both have requested me frequently to bleed them; but they managed to live comfortably for twenty years at least without their customary loss of blood, and both died a year or so ago, the one long past four score, the other nearly that. There are plenty of old people in this neighborhood who are past four score, and who have not been bled for twenty years, and they sensibly conclude they don't need to be.

Returning to Dr. C.'s cases, we will take the case of the old lady ninety-one years old, in her second childhood. Suppose the doctor had given her a *placebo*, if such a term could be applied to blood-letting, that is, bled her to about ten drops, instead of as many ounces, and made her believe it was a good deal—will he say it would not have done as well? She no more needed to be bled to any extent—than she needed the latest fashionable bonnet. The fact he mentions in regard to the ages of some parties who were bled, argues nothing in favor of blood-letting, but rather in favor of the superior sanitary and dietetic regulations of to-day, as compared with fifty years ago. People live longer in every community to-day than they did fifty years ago. Men were considered very old who reached sixty-five or seventy; now such ages, and much greater, are common. I hope those good old remedies, the lancet, opium, and calomel, will never go out of fashion. There are times and diseases in which they, or some one of them, are our sheet-anchors; but because this is so, is it any reason why they should be used in season and out of season? And are we to learn nothing as we go along? Is our science to make no progress corresponding with everything else? There are medicines in use to-day which were never thought of when Dr. C. commenced to practice, and which we could hardly do without; but while this is so, we need not entirely discard our old friends. We can use them when necessary. Opium has not, and never can have, a substitute, and the same can be said of calomel and the lancet; only let us not abuse the use of any of them, any more than we would or should any of our later remedies. To argue that blood-letting is the only remedy in every case, is to argue against light and knowledge, notwithstanding the able advocates of the practice in the person of Dr. Corson and others. WM. F. MITCHELL, M. D.

Addison, Pa., April 7, 1884.

NEWS AND MISCELLANY.

American Climatological Association.

The programme of exercises at the first annual Congress of the American Climatological Association, to be held at the Hall, northwest corner of Sixth and F streets, Washington, D. C., on May 3d and 5th, 1884, (sessions 10 a. m. and 3 p. m.) is announced as follows:

Papers: 1. Opening address, F. I. Knight, M. D., Boston, Mass. 2. "The Etiology of Pulmonary Phthisis," B. F. Westbrook, M. D., Brooklyn, N. Y. 3. "Dryness and Elevation the Most Important Elements in Climatic Treatment of Phthisis," Chas. Denison, M. D., Denver, Col. 4. "Some Observations on the Diagnosis of Pulmonary Diseases," D. N. Kinsman, M. D., Columbus, Ohio. 5. "The Effects of Humidity on the Cause and Course of Diseases," W. H. Geddings, M. D., Aiken, S. C. 6. "The Effects of Sea Air on Diseases of the Respiratory Organs," Boardman Reed, M. D., Atlantic City, N. J. 7. "The Use of Compressed and Rarefied Air, as a Substitute for Change of Climate, in the Treatment of Pulmonary Diseases," J. Solis Cohen, M. D., Philadelphia, Pa. 8. "The Constituents of Climate and Their Relation to Disease," J. Hilgard Tyndale, M. D., New York. 9. "The Relation of Laryngeal to Pulmonary Diseases," F. H. Bosworth, M. D., New York. 10. "The Climate of Large Cities Dangerous to Consumptives," Frank Donaldson, M. D., Baltimore, Md.

The above is a list of the papers already reported to the Committee. Others have been promised, but the titles have not been sent in. The order of reading will be arranged at the time of the meeting.

A New Surface Thermometer.

At a recent meeting of the Société Médicale des Hôpitaux, M. Paul exhibited a new form of surface thermometer of simple construction. The instrument consists of a straight stem and a spiral coil, which are connected to one another by a short junction at right angles to the direction of the straight stem. This essential part of the thermometer is enclosed in a covering of caoutchouc, which has the shape of a shallow hat or cupping-glass. In communication with the internal cavity of the hat is a hollow tube, provided with an elastic pear-shaped bag. When the latter is emptied by being squeezed, the open, somewhat funnel-shaped end of the hat is applied to the skin, and on relaxing the pressure on the elastic bag, the instrument becomes affixed by the atmospheric pressure.

American Surgical Association.

In our next issue we will give a report of the proceedings of the American Surgical Association, which met in Washington, April 30, May 1, 2, 3.

The American Medical Association.

The Pennsylvania Railroad Company has fixed the rate of fare for delegates at \$9.80 from New York to Washington and return, \$6.10 from Philadelphia to Washington and return, and \$1.65

from Baltimore to Washington and return. Limited round-trip tickets can be obtained, for these prices, at any of the offices of the road, on presentation of credentials.

Items.

—It is said that the recent flood has improved the health of Cincinnati by cleansing the unhealthy districts.

—Prof. A. Vercelli performed nephrectomy, in Milan, on March 10, for carcinoma of the kidney. The patient died in five hours.

—A case of chromidrosis (rose color) was shown by M. le Roy de Méricourt at the meeting of the Académie de Médecine on March 25.

—The New York State Assembly has passed a bill prohibiting the sale of drugs by any other persons than pharmacists and physicians.

—Prof. Alfred Stillé, after twenty years' service as a teacher, delivered his valedictory address to his class on April 10, his resignation, as announced at the beginning of the term, taking effect at the close of the session.

—Dr. H. H. Seelye, who recently completed his term of service on the house staff of Bellevue Hospital, has been appointed instructor in physical education at Amherst College, succeeding Dr. Hitchcock, who goes to Cornell University.

—Dr. Robert Wright, the oldest graduate of West Point, died at Centreville, Md., April 21, aged eighty. The doctor had served his country faithfully for many years, and had held many positions of public trust in Maryland, his native State.

—The bill defining the titles and duties of army medical officers of the higher ranks has passed the Senate. Surgeons with the rank of Colonel are to be styled Assistant Surgeons-General, and those with the rank of Lieutenant-Colonel, Deputy Surgeons-General.

—The French Government is reported to be preparing a system of quarantine and inspection of vessels arriving from infected ports, in view, it is said, of the present prevalence of the disease in India. A London dispatch dated April 23 reports the arrival of an English ship at Alexandria, Egypt, from India, with a case of cholera on board.

OBITUARY NOTICE.

DR. WILLARD PARKER,

The distinguished New York physician, whose health has been gradually failing for the past six months, died April 25. Dr. Parker was 83 years old, and had been a practicing physician over fifty years. He was born in Hillsboro, N. H., on the 2d of September, 1800, his ancestors on both sides being English Puritans, who came to Massachusetts in 1640, and settled at Chelmsford. They were active farmers, and more than one member of the family became distinguished in the revolutionary war. Willard Parker was a farmer's boy, working from sunrise until sunset on his father's possessions. At 19 he had fitted himself as a teacher, and, by diligent study, prepared himself for Harvard College, where he was graduated in 1826.

He then began the study of medicine in the city of Boston, and later he went to Woodstock, Vt. In 1830 he was appointed to the chair of anatomy in the Berkshire College, at Pittsfield, Mass. In 1836 he accepted the chair of surgery in the medical college at Cincinnati. Soon afterward he went abroad, and spent some time in the French and English hospitals. Ill health forced him to leave the West on his return, and he was appointed to the chair of surgery in the College of Physicians and Surgeons in New York city. His life since then has been one of peculiar devotion to the interest of his profession.

In 1856 he was appointed visiting surgeon to the New York Hospital. In 1865, on the death of Dr. Valentine Mott, who was then President of the New York State Inebriate Asylum, at Binghamton, Dr. Parker was appointed his successor. In 1870 Dr. Parker resigned the active duties of his professorship of surgery in the College of Physicians and Surgeons, becoming Emeritus Professor of Surgery. In the same year he received the degree of LL. D. from the College of New Jersey at Princeton. He was consulting surgeon to the New York, Bellevue, St. Luke's, Roosevelt, and Mount Sinai Hospitals, and the Home for the Ruptured and Crippled. He was a member of the New York Medical Society, American Medical Association, the New York County Medical Society, the Academy of Medicine, the Pathological Society, the New York Medical and Surgical Society, and the Society for the Relief of the Widows and Orphans of Medical Men. He was an honorary member of many other societies.

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

I would like to ask, through the REPORTER, what the most successful treatment is for pruritus ani? Also for the treatment of oxyuris vermicularis? I hope to hear of something that will be better than anything I have found as yet for the treatment. E. R. S.

Metz, Ind., April 7, 1884.

MARRIAGES.

BULLARD—HUPP.—At the First Presbyterian Church, Wheeling, W. Va., Wednesday afternoon, April 23, 1884, at three o'clock, by the Rev. Dr. Cunningham, Dr. R. H. Bullard and Miss Annie L. Hupp, daughter of Dr. John C. Hupp. No cards.

LYLE—ALEXANDER.—At the home of the bride's mother, in Bellevue, Pa., Wednesday evening, April 9, 1884, by the Rev. T. R. Alexander, Dr. John W. Lyle, of Washington county, Pa., and Ada E. Alexander, of Bellevue.

SWIFT—GRIFFITHS.—At St. Paul's Church, Des Moines, Iowa, Wednesday, April 16, 1884, by the Rev. W. H. Van Antwerp, Lawrence Chew Swift, M. D., formerly of New Brunswick, N. J., and Miss Mabel Bruce Griffiths, daughter of Colonel Joseph M. Griffiths, of Des Moines, Iowa.

DEATHS.

CUYLER.—At his late residence in Morristown, N. J., on Saturday evening, April 26, 1884, Dr. J. M. Cuyler, Brigadier-General in the United States Army.

PARKER.—At his residence, in New York city, Friday, April 25, 1884, Dr. Willard Parker, in the eighty-fourth year of his age.

WEATHERBY.—In this city, April 20, 1884, Joseph C. Weatherby, M. D., in the seventy-second year of his age.

THE MEDICAL AND SURGICAL REPORTER.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

THREE CASES ILLUSTRATING SOME POINTS IN THE PATHOLOGY OF CERTAIN INJURIES OF THE SHOULDER- JOINT.*

BY C. B. NANCREDE, M. D.,

Surgeon to the Episcopal Hospital, and to St. Christopher's
Hospital for Children.

A few preliminary anatomical points must be passed in review for the ready comprehension of my later remarks. The shoulder-joint differs in many important points from any other articulation of the body. A moment's reflection upon the almost unlimited range of movement which it enjoys, will at once suggest that the ligaments of this articulation cannot be the means by which the joint-surfaces are held in apposition; otherwise, anything like freedom of movement would be impossible in a ball and socket-joint where the socket is so shallow as in this articulation. What then does hold, firmly apposed, the articular surfaces? It must be something always tightly stretched, yet always capable of lengthening, or rather always practically loose. Nothing but muscle could fulfil any such purpose. In truth, the muscles surrounding the joint are the most important ligaments the articulation possesses. When these are paralyzed, or in the cadaver, the head of the humerus readily falls away from the glenoid fossa. Bearing this fact in mind, you will clearly apprehend that the joint surfaces are kept pressed together solely by muscular ten-

sion. Again, the glenoid fossa, unlike the socket of any other important joint, *has no epiphysis*, which explains to a degree the fact that even in the young the head of the humerus may be so affected as to demand excision, while the glenoid process is either entirely or nearly healthy. Closely related with the scapulo-humeral joint, we find a number of bursæ, some of which commonly communicate with the joint, while others do not. To the former alone I shall devote my remarks. There is a large one between the acromial process and the coraco-acromial ligament upon the one hand, and the shoulder capsule upon the other. The bursæ—the exact sites are unimportant for our present purposes—are situated between the subscapularis muscle and the capsule. An occasional one is placed between the infraspinatus muscle and the capsule, into which it often opens, as do the others just mentioned. Let an inflammation be set up in these sacs, and it certainly spreads to the joint itself, should communications exist, or nearly as surely by mere contiguity of tissue, if no opening between joint and bursæ is present. The articulation is securely covered in by the voluminous deltoid, so that any direct injury to the fibrous or synovial tissues of the joint is almost impossible from direct force, as a blow, although a twist *may* injure it, notwithstanding the latter is more apt to tear the bursal walls. The upper epiphyses of the humerus—of which there are three—coalesce at five years; but they leave a layer of epiphyseal cartilage between head and tuberosities and shaft, which in places either coincides with the capsular attachment, or is actually within it. From these anatomical facts it must be clear that direct force,

* Read before the Philadelphia County Medical Society, March 20, 1884.

as a blow, can rarely injure the joint itself, but must either set up trouble in the surrounding bursæ, or in the epiphyseal cartilage, or in both. Once again, the interior of the joint, the muscles moving the joint, and the skin over their attachment, are all supplied by the same nerve or nerves; so that let a joint injury start where it may, the articulating surfaces of the shoulder-joint are subjected to such an injurious degree of pressure from direct or reflex muscular contraction as is possible for no other articulation. The bearing of these anatomical facts upon prognosis and treatment need hardly be pointed out.

The first specimen I proposed showing was presented to the society some years back, and my reason for again showing it is the sharply contrasted result presented by the second specimen which I shall exhibit.

On November 27, 1878, the society had an opportunity of examining the first patient and the admirable results of the case. To those who were not present, or who have forgotten the details, I will briefly recapitulate the history of the case, with the treatment pursued.

Compound Fracture of the Anatomical Neck of the Humerus.

"The patient, J. M., æt. 14 years, fell, upon the afternoon of September 23, 1878, from a tree about twenty-five feet, landing on the ground, but striking in his fall against the branches of the tree, and sustained the following injuries: The shaft of the humerus was separated from the head and greater and lesser tuberosities. The line of fracture closely followed the epiphyseal cartilage, although in several places the diaphysis was fractured. The shaft, slightly split, was driven through the integuments over the lower part of the deltoid muscle on its anterior aspect, tearing in its course the following parts: the insertion of the deltoid was completely stripped off with the subjacent periosteum; the coraco-brachial, teres major, and latissimus dorsi were in like manner torn off, the latter carrying with them the posterior lip of the bicipital groove. The tendon of the pectoralis major was torn off about half an inch from its insertion, and one, if not both heads of the biceps, was ruptured. In consequence the head and neck of the bone, deprived of periosteum, merely hung suspended by the capsular ligament and the rotator muscles. The shell of bone connected with the head and tuberosities was fissured at various portions of its circumference, as if by the impacting action of the wedge-shaped extremity of the shaft. I enlarged the wound and removed the fragments you see, viz.:

4½ inches of the humerus, including its head. Seven weeks after the operation he could remove his coat, vest, and shirt without assistance. Ten weeks after the injury considerable reproduction of bone, even up to the margin of the glenoid cavity, was observed, with new attachments for the pectoral and latissimus dorsi muscles, as determined by Dr. C. T. Hunter. The actual shortening consequently amounted to only 1½ inches. He had perfect use of the forearm, could put his hand to his mouth, behind his back, and to his ear. Of course he had lost all over-hand movements."

The course of treatment pursued, and my reasons for deciding upon it, seem worthy of detail, since such injuries are but seldom seen, and, as far as I can discover, no clear rules have been laid down for their treatment. To the members of this Society who devote themselves especially to surgery, I need hardly say that no question of amputation arose in my mind; but to those in pure medical practice I would say, that when the main vessels and nerves of a limb remain intact, the injury to the soft parts having been produced by the bone itself, not the fracturing force, almost any degree of shattering of the bones may be recovered from, in the young, without amputation. Two lines of treatment then offered for consideration, viz: the simple return of the bone, closure of the skin-wound, drainage, and trusting the case to nature; or the resection of the injured bone. Theoretically the first would have seemed the better course, promising no shortening of the limb, and the retention, in a measure, of the power of the deltoid. In reality, however, the chances of union were not one in a thousand; and if not union, then necrosis with its consequent shortening; necrosis, too, meaning months or years of inflammation and suppuration, matting the muscles together so that when recovery occurred—almost necessarily by an operation—the usefulness of the limb would be but slight. Resection, on the other hand, offered the complete removal of all injured portions of bone, and with them the most important factors of trouble after such an injury, thus permitting rapid healing, and the smallest possible amount of inflammatory adhesions between muscles, tendons, etc. If the bone had been simply returned, the risk to life would have been greater, owing to the prolonged suppuration incident upon the separation of the necrosed bone and the deep-seated abscesses so common after compound fractures. Against it was the absolute shortening of the arm, with the prospective cessation of growth due to removal of the upper humeral epiphyses.

The actual result, I think, bears me out in the course of treatment pursued; for I hardly think that in seven weeks he would have been in so good a condition, with the wound soundly healed, if I had followed what is often, but falsely, called the "conservative" plan of treatment. I believe that true conservatism indicated exactly what I did. The amount of shortening would not have been much less had the case been left to nature and necrosis. Had this occurred, union of the severed head could not have taken place; and then the same shortening would have obtained, as surely as if the epiphysis had been removed. Army experience has shown that when a portion of the upper end of the humerus is removed for injury, nothing is gained by leaving the uninjured head, since it necroses.

Although not cognizant of this fact of experience at the time of operation, anatomical knowledge, general surgical principles and experience, induced me to arrive at a conclusion by *a priori* reasoning, which I have since found that extended experience had already proved.

I believe, therefore, that, theoretically and from experience, resection ought to be performed for such injuries. It is hardly necessary to say anything about the operation itself, since each case must be a rule for itself, the only point being to remove the bones with as little additional damage to the soft parts as practicable. The wound was dressed antiseptically, and when I transferred the wards to my colleague, Dr. Packard, no suppuration had occurred, and there was not the slightest inflammatory blush about the wound. He did uninterruptedly well, and the wound was soundly healed in less than seven weeks, the greater part at a much earlier date.

Sharply contrasted with this case and its results is that of the patient from whom the next specimen was removed, where the head of the humerus, luxated and partially fractured and protruding through the skin of the axilla, was *reduced* instead of being resected. Here the tension of irritated, lacerated muscles, conjoined with the necessarily imperfect drainage, kept the injured bone bathed in unhealthy pus. This, with the injury, resulted in an osteomyelitis, which necessitated my amputating at the shoulder-joint. I believe, had the head of the bone been removed, a fairly useful limb would have been the result at the end of a few weeks' treatment; while instead, after three months of illness and risk to life, amputation was the best I could do for him.

Compound Luxation (with Fracture) of the Shoulder-Joint.

"———, æt. 30 years, man, three months

ago had his right arm caught by the belting and drawn over a large drum in a position of extreme abduction and probably of extension. The head of the bone was luxated, the greater tuberosity torn off, and the caput humeri thrust through the axillary integuments near the anterior axillary fold. When I first saw him at the Episcopal Hospital, after the accident, he was very pale, with a constant discharge of pus from an opening at the site of the old wound, *i. e.*, near the anterior axillary fold, while the orifice of another deep-seated sinus was seen over the middle of the triceps on the outer side of the arm. A probe introduced into the anterior sinus readily touched the denuded carious head of the humerus. I attempted to exsect the head of the bone, but when prepared to saw it, after its protrusion through the wound, I found such evidences of osteomyelitis as to render amputation at the shoulder-joint necessary. He did well and recovered; but even some months later a sinus existed, doubtless the result of necrosis of some of the fragments of periosteal bone, produced by that irritated structure. As before said, had the head of the injured bone been excised, a useful arm would have probably resulted."

The third and last case is one where a comparatively trivial injury, owing to non-treatment at first, resulted in a condition which demanded resection of the shoulder-joint.

Chronic Arthritis of the Shoulder-Joint: Epiphyseal Abscess of the Humerus.

"Anna M., æt. seventeen years, was admitted to the Female Surgical Ward of the Episcopal Hospital, May 14, 1883. One year ago last May she fell down stairs and struck her shoulder. She was unconscious for a short time, but was soon able to walk home. The arm did not become inflamed, and seemed to the patient well. Nine months after the fall she noticed pain in the shoulder, and an elevated papule formed near the joint, which was opened at the dispensary. This relieved the pain, but left a fistulous tract discharging healthy pus. She attended the dispensary until the 14th of last May, when she was sent into the house, Dr. Seltzer, the Assistant Surgeon on duty, having touched dead bone with the probe. After admission she had pain from time to time, gradually increasing in intensity until shortly before operation. Other free openings for drainage were made by Drs. Simes and Kelley. The probe detected an apparent sequestrum within the humeral head. Diagnosis, epiphyseal abscess.

"The operation showed complete destruction of

the joint, acarious and denuded humeral head, with an abscess about the epiphyseal site containing a sequestrum. The glenoid cavity was denuded of cartilage and roughened. The portions of head and shaft, such as you see, were removed, while all the glenoid cavity was cut away with the gouge-forceps, except where the long head of the biceps was attached. Further details of the operation are unnecessary. The patient was practically well at the end of two weeks. Perfect quietude of the joint at the outset might have averted all subsequent trouble."

What was the condition here after the accident? Probably the bursæ and fibrous tissues surrounding the joint were involved, and the vascular epiphyseal cartilage was congested from the jar and injury of the fall. Congestion of all these parts, instead of being relieved by complete functional rest of the articulation, with the local application of ice, leeches, etc., as appeared indicated, was kept up by the girl following her usual occupation of housework. Although in no sense markedly strumous, yet the tendency was in that direction. As the congestion increased, inflammation and suppuration were set up in the bursæ, the disease spread to the articulation, gelatinous arthritis with epiphyseal abscess supervened, notwithstanding the skillful treatment of my colleagues who, *too late*, had the opportunity of treating the case.

THE TREATMENT OF SOME OF THE EFFECTS OF SEXUAL EXCESSES.

BY JOSEPH L. BAUER, M. D.,
Of Lehighton, Pa.

(Late Lecturer on Genito-Urinary Surgery, St. Louis College of Physicians and Surgeons.)

In studying the works of Acton and Lallemand, one is struck with the singular pictures there painted of the serious results of sexual excesses. We are seized with doubt, and are apt to ascribe them to a highly-gifted imagination. The late Dr. G. W. Beard was also possessed with a similar happy faculty of portraying the same conditions; with the difference that in coining neurasthenia, myelasthenia, and cerebrasthenia, with their numerous attachments, he made some other diseases fit upon the same foot. We had heard a great deal of this book, and determined to study it carefully. A conclusion was reached rapidly, viz., that Americans think, eat, drink, and sleep differently from other nations of the earth, and hence suffer horrible tortures from the several *thenias* above enumerated. A second thought arises, however; we are struck with the fact that

the great majority of conditions therein described are *but the consequences of sexual excesses*, beautified by an elegant nomenclature. In fact, the descriptions have been absorbed *ad libitum* by a quack concern in New York city, with the usual charitable intention of such impostures. We are fully acquainted with the great differences in cases attended by individual surgeons; we acknowledge that sexual excess sometimes produces serious pathological conditions (Erb, Rosenthal), hence we should qualify our doubts somewhat. But when all things are equal, authority, however great, should be cast aside, and stubborn facts alone should rule.

A large number of cases attributable to the effects of excessive venery, have given me an opportunity of testing the value of different methods of treatment, as well as giving me a fair idea of the relative differences between excessive coitus and frequent masturbation. In one of the medical journals of St. Louis of 1882 and 1883, the reader will find an extended delineation of my views. Therein I have endeavored to show that there is an *essential difference in the orgasm, the seminal ejaculation, and in the mental and physical results.*

"When impelled by sexual excitement, the male seeks intercourse with the female, the erectile tissues of the genital organs become turgid with blood (MUCOUS MEMBRANE OF URETHRA ALSO, J. L. B.) (§ 276), and the surface acquires a much increased sensibility: this is especially acute in the glans penis. By the friction of the glans against the rugous walls of the vagina, the *excitement is increased (as it is also in a small vagina and in masturbation, J. L. B.)*, and the impression which is thus produced at last becomes so strong that it calls forth, through the medium of a ganglionic centre, probably situated in the lower portion of the spinal cord, a reflex contraction of the muscular fibres of the vasa deferentia, and of the muscles which surround the vesiculæ seminales and prostate gland. *The high degree of nervous excitement* which the act of coition involves, produces a subsequent depression to a corresponding amount (*ergo, the greater the excitement, as in masturbation, the greater the depression;*) and the too frequent repetition of it is productive of consequences very injurious to the general health. This is still more the case with the solitary indulgence, which (it is feared) is practiced by too many youths; *for this substituting an unnatural degree of one kind of excitement for that which is wanting in another, cannot but be still more trying to the bodily powers.*"*

* W. B. Carpenter, M. D., Principles of Physiology, page 888.

I have also tried to prove that the reasoning faculties may not be impaired, and yet there is a potent change in the volitional qualities of the individual afflicted, which tends to the continuance of a habit formed, over which the will has lost its entire control, notwithstanding a full realization of the consequent pain such sensations may occasion.

"In man, . . . the principal operation of the sexual sensations is in awakening desires and affections, which serve as excitements to the intelligence and as motives to the will; and it is only, under ordinary circumstances, when the two sexes have been thus brought into close relation, that direct reaction of the sexual sensation manifests itself in automatic movements. In cases, however, in which this sensation is excited in *unusual strength*, it may *completely overmaster all motives* to the repression of the propensity, and may even *entirely remove the actions from volitional control.*"* And I have tried to prove, that the volition cannot be aroused by moral suasion only; that the habit cannot be overcome by the barbarous method of infibulation, practiced somewhat by German surgeons; BUT THAT IN BAD CASES THE INDIVIDUAL MUST BE RELIEVED OF HIS FEAR OF WOMAN, AND BE TAUGHT THAT NORMAL COITUS IS HIS ONLY SAFETY.

I do not desire to transcend the intention of this article with a lengthy rationale of the conclusions stated above: future opportunities will permit of a more extended discussion.

Now, what are some of the effects of sexual excesses?

Deep urethral hyperæsthesia, producing irritation of the genital centre of the spinal cord: (1) increasing or decreasing the inhibitory influence which the brain exerts upon the genital function; (2) irritation of prostate gland; (3) congestion of seminal vesicles; (4) spermatorrhœa; (5) stricture of the urethra; (?) (6) nervous disturbances of the intestinal tract, *i. e.*, dyspepsia, flatulence, constipation; (7) palpitation of the heart; (8) impotency (psychical and organic); (9) melancholia, hypochondria, and insanity.

Other disturbances are met with which, however, do not concern us just now. What are we to do when we have to deal with irritation of deep urethra, spermatorrhœa, stricture of urethra (?), and impotency? In fact, cannot all these effects be relieved by medication—local and internal—without resort to fashionable instrumentation?

Is it necessary that we should jam bulbous metallic sounds into every such urethra, and detect a NARROWED CALIBRE and a membranous constriction? In fact, should the urethrotome be considered the special panacea for such discoveries?

In consequence of the continued excitation of the entire genital tract, there is a sequential hyperæmia of the mucous membrane of the urethra as well as a CONTINUED *hyperæsthesia* of the terminal nerves imbedded in the mucous membrane. But, as far as experience, personal as well as otherwise, teaches us, there are but a few isolated cases on record of typical inflammation resulting therefrom. I cannot, therefore, appreciate how it is possible that stricture of the urethra can ensue, unless the laws of pathology are reversed, and we are taught that every congestion long continued must necessarily result in effusion of lymph. I am well aware that the constant exercise of a reflex act may influence muscle, as well as alter the function of nerves, but I have not learned in how much such continued reflexes influence elastic tissue, upon which urethral calibre depends, unless altered by the products of inflammation, *'unless it be the circular muscles of the urethra.* The discharge which accompanies some of these effects can surely not be attributed to an inflammatory condition, since the mucous membrane contains numerous glands, which supply a lubricating fluid, or modify the semen. It is self-evident that overaction of the entire nerve-supply of the genital tract produces also over-action of many of the secretory functions.

Clinical experience has demonstrated that the *consequences of sexual excess are to be found almost in toto in the nervous system, and that few or no ORGANIC CHANGES take place.* It might be asked, if this be so, why is it that—given urethral hyperæsthesia from these stated causes—we use gradually increasing sizes of sounds, and accomplish much with them? I might also ask at this juncture, *why does this hyperæsthesia exist along the entire urethra, and is intensified in the deeper portions?* Physiology teaches us that the intensity of the orgasm is experienced in the prostatico-membranous portion of the urethra, where the nerve-supply seems to be more closely approximated, greater, and connected with ganglionic bunches. The corollary would be correct, therefore, that at this point we should expect to find the greatest effects. And it is to this point that Profs. Otis and Gross, the late Prof. Brown, and Dr. Mastin, of Mobile, seem to direct their surgical engines. But Prof. Gross, in a late work on Diseases of the Male Genital Organs, lays enthusiastic stress upon the

* Wm. B. Carpenter, M. D., Principles of Human Physiology (Smith), page 684, § 356.

miraculous work that the urethrotome has done in these cases.

Now, let us examine the *modus operandi* of Prof. Gross. A patient presents himself to the doctor suffering from the effects of masturbation. The penile organ is small and flabby; the meatus puffy, congested, and the lips agglutinating. A bulbous metallic sound of small calibre is introduced, demonstrating considerable hyperæsthesia of the urethral tract, and *some difficulty of moving onward*. Upon its withdrawal an *impediment is felt in the membranous portion*, but a little exertion allows the instrument to glide over it. When withdrawn the distal end of the bulb is crowned with a gleetty secretion. The circumference of the penis is then taken, the ought-to-be calibre decided; urethra-metre introduced; and at points of resistance, whether in the anterior, middle, or deep portions it is cut to the proper calibre. A steel sound is introduced frequently, and the patient returns home a happy man.

Before proceeding to criticise this method of treatment, it were well to consider a few anatomical points.

a. The urethra is a membranous tube, with diameters varying in different portions.

b. Elongation of the canal is fostered by the existence of longitudinal muscular fibres, chiefly in the deep urethra.

c. A change of urethral diameter is governed by elastic tissue and circular muscular fibres.

It seems to me, therefore, that an excessive irritation of peripheral nerves would exert itself upon the *muscular structure, depending upon such irritation for their physiological action*. If such be possible, can not we assume, that the *opposition to distension in the application of the urethra-metre is due to spasm of these circular and longitudinal muscles*? And is this not the case, where spasmodic stricture is produced by the use of sounds, and other causes of peripheral irritation? I am well aware that this does not coincide with the dictum of Prof. Otis and his disciples, who hold that the cause of spasmodic coarctation must be sought in the organic narrowing of urethral calibre. But it is a clinical fact, that these very coarctations, which are so effectually removed by urethrotomy, can be, and are, removed by the careful and progressive use of sounds, and the anti-spasmodic influence of the constant electrical current. And I believe also, that the sounds have the same effect upon a nerve that nerve-stretching has upon sciatica and locomotor ataxia. Indeed, I had the opportunity of examining a patient who had been suffering from the effects of masturbation, and who had been cut

by one of our reputed eastern urethrotomists, in which no relief whatever ensued, but the ailment subsequently subsided by a purely sedative treatment.

(To be Continued.)

THE HEALTH OF WOMAN AS COMPARED TO THAT OF MAN, ESPECIALLY IN RELATION TO MARRIAGE.

BY GEORGE HAMILTON, M. D.,
Of Philadelphia.

This subject has for some time past received a good deal of attention, and, during the few past years, it has been made to assume increased importance, not only in medical lectures and writings, but also in the transactions of associations established for the advancement of hygiene. As a rule it will be found that the status of woman in regard to health is represented to be much lower than that of man. In this point of view it is not surprising that, from the time she has arrived at marriageable age, attention is chiefly given to this period of her life, and expressions of regret are often heard that so many are ill-prepared for the duties and exigencies of married life. But while this unfavorable view is in many cases justified, is it not far more frequently entertained than a due consideration of the facts pertaining to this subject will warrant? Is there anything, at the moment of birth, or for years after, indicative of a more feeble constitution, or greater proclivity to disease, in the female than in the male, so that doubts might arise as to her capacity to occupy the future position assigned her by nature? On the contrary, statistics show that more male than female children are still-born, and also that more males from birth to the fifth year perish than females, chiefly owing to their greater disposition to disease of the brain. As the female approaches womanhood, and for some years after, especially if she marry very young, the chances for health and longevity are to some degree diminished. Taking the entire period of child-bearing, statistics are not in accord as to the comparative mortality; but beyond that period the chances, for health and length of days, turn strongly in favor of the woman. But this prolonged existence may readily be explained in the fact that not very many women are addicted to the use or abuse of intoxicating liquors—an abuse of a character, as all statistics prove, to cause in men an enormous amount of physical and mental disease. To agencies of another kind are often attributed the unfitness of very many females for the duties and trials of wedded existence. Lec-

turers and writers upon this subject have, as it were by common accord, placed in this class many of the daughters of wealth and fashion. In this class, as in every other, may be found those who, by inheritance or otherwise, possess feeble constitutions, and who in matrimony may not only incur risk of further injury to health, but whose offspring may have constitutions similar to those of the mothers. Another class, having good health and constitution, may, through a constant, protracted course of fashionable dissipation, destroy or greatly impair both, and may thus, so far as matrimony is concerned, be placed in the category alluded to. The number in both classes is, the writer has reason to believe, comparatively small; so small, indeed, as not to justify a general charge against this condition of society, as an appeal to facts may prove.

Let us, for instance, stroll, at certain hours of the day, through that portion of the city which, par excellence, may be regarded as one of the most fashionable and wealthy, having as its centre Rittenhouse Square, and what will at once gratify and attract our attention so much as the numerous groups of children in and about the square, of every age, from the infant of a few months or a year, up to children of perhaps eight or ten years? Infants, too young to walk, are being trundled about in all directions, their plump forms, rosy complexions, bright eyes, and cheerful looks, giving visible evidence of their excellent health. Others of suitable age are, by direction of intelligent parents, instructed to avoid the coach, and thus bring the muscles of the limbs into action, and thereby increase the appetite and power of digestion, so as to improve the strength and tone of the whole system. When old enough, the children (girls as well as boys) are provided with a variety of implements used in various amusing and healthful games, or with one or other of the many machines now in vogue for rapid and pleasant locomotion. But again, the residences of these children are nearly always large, admitting perfect ventilation, and provided with conveniences that conduce, in no small degree, to the comfort and well-being of the occupants. Another point, greatly advantageous to daughters, from childhood to womanhood, is that, as a rule, the parents are educated and refined, and are therefore the better able to discover and carry into effect all that pertains to the physical, intellectual, and moral welfare of their children, especially as regards the daughters.

Thus far, it may be said, very good; but, arrived at womanhood, then comes the trial, by en-

tering upon a round of fashionable dissipation that too often attends the social status in view, especially when no incumbent occupation or duties interpose an obstacle. But there is another side to this picture, in the fact that only a part of the time is thus employed, and a very large number of these devotees of fashion spend much of their time in riding in the open air, or, like the ladies of England, in promenading—the best of all exercises. Again, as soon as the season arrives for leaving the city, a very large majority close their houses, repair to their summer homes, or to the almost innumerable places of resort by the seaside, or to situations (in rural sections) noted for their salubrity. Here their enjoyments are in a great measure of an active kind, and are thus productive of increased health and strength.

That there are other, and quite opposite, conditions of society, in which the females are incomparably less healthy than those in question, is beyond doubt—and have far less qualification for matrimony, or longevity.

But what are the actual qualifications of man for matrimony, as compared with woman? If the statistics of some writers be correct—that the mortality of woman, during the whole period of child-bearing, is about the same as that of man for the same period—then the conclusion is inevitable that some deleterious agents are in operation upon man; for women must surely encounter certain risks peculiar to pregnancy and accouchement.

As intimated above, the use, or rather abuse, of intoxicating liquors, is so common with men that probably ten of them suffer mentally and physically from this cause for one woman. But this is not all; for, as is well known, the stimulus of alcohol, in any form, is too often the stimulus of every evil passion; and as men generally defer marriage to a later period than women, so are they more apt to become the victims of dissipation of every kind, and consequent disease or debilitation. This condition exists in every class of society; and where the pecuniary condition is abundant, the temptation and inducement are thereby increased.

From this statement, may it not very often happen that favorable qualifications for matrimony are deficient on the side of the man rather than of the woman?

The writer is aware that this view may not accord with that of the gynecologist or the special accoucheur; but would not the large amount of this special practice induce those engaged in it to imagine that such cases are far more numerous than the general practitioner could admit?

In the "Report of the Medical Association of

Missouri for 1883," may be found a well-written and elaborate paper upon this subject. After making due allowance for such cases in men—accidents, dissipation, or other agencies—and allowing in like manner for such influences as may at certain periods affect females unfavorably, Prof. Schenck, the author of the paper, seems inclined to the opinion that woman has the greater vitality, and that under equal conditions she has a better prospect of length of days. This opinion, granting that equal conditions were possible, is well-founded; but while man, in general, has greater muscular power, that is no evidence of greater or even equal vitality; for it not unfrequently happens that neither the man nor the woman of large bone and muscle has the hardihood and endurance of persons of moderate conformation. But was it not absolutely necessary, in view of the destined life of the woman, that an all-wise Providence should endow her with an amount of vital endurance commensurate with the tax upon her constitution that pregnancy, child-birth, lactation, and the care of her offspring, would impose? In regard to ability to support attacks of fever or other acute disease, the writer has generally found the advantage to be on the side of the woman; and the accoucheur and the gynecologist, in particular, could not fail to have observed the frequent recuperation of females after extensive surgical operations, and immense losses of blood occasioned thereby, or as occur in cases of abortion and accouchement.

HOSPITAL REPORTS.

TREATMENT OF EPITHELIOMA OF THE UTERUS.

CLINICAL LECTURE DELIVERED AT THE LONG ISLAND COLLEGE HOSPITAL,

BY DR. A. G. C. SKEFE,

Professor of Gynecology and Visiting Surgeon to the Hospital.

Reported by EDWARD DEVELIN, M. D.

GENTLEMEN: The patient whom I here present to you is a married woman, thirty-five years of age. She was married at the age of fifteen, and has since borne eight children, the last child being now eighteen months of age. Six months ago she was compelled to wean the child, owing to exhaustion on her part from a hemorrhage from the uterus. She states that she underwent an operation for this difficulty, but that it afforded her no relief; that the hemorrhage still continued from time to time. She also informs me that with none of her other children did her menstrual flow commence until she had weaned them; but with the last child, after nursing for some months, she had, on two occasions, a flow which probably was menstrual; but following these, she had repeated

attacks of metrorrhagia, and it was for this latter that she was operated upon. As I before stated, this treatment was useless; and at the present time there is more or less hemorrhage occurring about every third or fourth day. She is also suffering intense pain, and during these periods becomes greatly prostrated.

On looking at this woman, we see a person who is not at all emaciated, but, on the contrary, one who has rather an abundance of adipose tissue. She is extremely anæmic; her pulse is now about one hundred and twenty, more like the pulse of a little child, weak and feeble, owing to these continued hemorrhages. The complexion has a peculiar cachectic appearance, accompanied with a slight flushing of the cheeks; the skin is dry, harsh, and ill-conditioned. She is suffering from general derangement of nutrition. As the woman now rises to leave the room, she at once places her left hand over the region of the ovaries, the pain in the pelvic organs being so intense; you also notice that her gait is feeble and unsteady.

An examination has previously been made as to her condition before entering the lecture-room, and I will now demonstrate upon the blackboard the appearance of the uterus. When we secure such a history as we have just now received, we can almost diagnosticate our case at once without further examination. It is certainly out of the ordinary line of health for a patient to have recurrence of the menstrual periods, if such they were, so soon after the birth of her child, which, in turn, were followed by this metrorrhagia, which from the exhaustion ensuing, necessitated the weaning of the child.

When we take all these points into consideration, together with the severe pelvic pains, we are convinced that there is some serious difficulty, and that an investigation is needed.

Now, we find here that the uterus is much enlarged in both body and cervix; the cervix, however, is more in proportion than the body. The os externum is widely opened, and the outer portion of the cervix is rough and ragged. If you can imagine the cervix looking very red and angry, bleeding under the slightest touch, you have a fair idea of the condition I desire to impress upon you that the cervix presents. In addition to this, you must remember that it is greatly increased in size. We have then not only all the evidences of sub-involution, but more than that: we have here a new growth involving the entire canal of the cervix; and by this time perhaps nearly every one of you is ready to state that we have here a case of malignant disease. She is but thirty-five years of age, and has not yet entered the descending plane of life, which is, as we know, rather early for malignant disease to appear. I have no doubt, however, that such is the case, and that it is with malignant disease that we here have to deal.

The question is as to the form of malignant disease. This new growth, of irregular, cauliflower formation, indicates epithelioma; and the intense density of the other portion of the cervix suggests that it may be a development of epithelioma upon a scirrhus base; the epithelioma choosing the mucous membrane, and the scirrhus choosing the deeper tissues; this may sometimes occur. This at least is my diagnosis in relation

to the pathology of this growth of new tissue here developed.

The patient, although very fleshy, is extremely weak; and she is beginning to show that condition of nutrition of the skin which gives us this cachectic appearance. It is a strange fact that this kind of an organization, those having a superabundance of fat, are more likely to develop malignant disease than those of spare, lean habits. It is this kind of organization which is predisposed to malignant disease. It is a rare occurrence for a thin, wiry individual to develop malignant disease in the earlier years of life.

Another point worthy of notice is the pain which the patient suffers; for you remember that when the intra-vaginal portion of the cervix is involved in malignant disease, pain is the exception to the general rule. So that when we read of the diagnostic pain of cancer, we know that the statement is misleading in relation to cancer of the cervix alone, for unless the upper structure of the uterus be involved in this malignant disease, pain is very rarely or never felt. This then, placed in relation to the case now before us, would lead us to accept the fact that the upper structures of the uterus are also involved; and our previous examination has proved that it is so, and therefore no exception to the rule.

Having now obtained all the facts in relation to the case, the question arises, What can we do for her? You will first naturally ask, What was the previous operation? In all probability, it was no operation at all. I have two very good reasons for making this statement: the first is, that no evidences of any operation ever having been performed can be discerned; the second is, that the man who performed this so-called operation, I have learned, has since been arrested for practicing without a diploma. This is a painful thing to report, when the life perhaps of a fellow creature has been involved by such criminality. But it is far from unfrequent that we find such charlatans choose the uterus as their field of operations, as their maltreatment is not likely to be exposed. They can damage this organ without much danger of their trickery being discovered, and it is in the field of gynecology that these charlatans work such ruin and mischief. The man in this case, before us was not detected in his humbuggery, for such I am sure that it was; although we have here but too evidently, in the suffering of this poor woman, a blight and disgrace to our profession and government, that such men, at the present enlightened day, are allowed, even for a short time though it may be, to abuse the noblest calling that we have the honor to represent.

I am reminded of this very forcibly by the facts relating to a lady who came to my office recently with a friend, stating that she believed she had some uterine trouble, and wished for an examination. I asked her who was her attending physician, and, had she given me the name of some reliable man, I should have given due weight to his diagnosis; but she stated that I did not know him, and declined to mention his name until I had made my examination and given my diagnosis. I had therefore nothing to do but make my examination, which I carefully did. I then found a small cyst protruding from the cervix, a mere trifle, which was only peculiar because it was pro-

truding and not imbedded in the walls of the cervix. It was simply superficial, and much more easily removed than a wart upon the hand, and with as little danger. She was remarkably healthy in every respect; her sexual organs were perfectly developed, and free from disease. This little cyst being near the canal of the cervix, had given rise to a hyperæmic condition and slight leucorrhœa. I assured her this was of but little consequence, and could easily be removed; and had she not held me to certain restrictions, I should have removed it at that time. She then informed me that her physician had told her that it would be necessary to perform an operation, involving the amputation of the cervix, and that his fee for this operation would be three hundred dollars. Her friends, however, advised her before consenting to this operation to consult me. I removed this small cyst shortly after, and a few days following she presented herself at my office perfectly well. Had she been guided by this other man, she would probably have lost the neck of the uterus, and paid a large fee for the mutilation.

I am disposed to be charitable to the profession in general, as they have been charitable towards me; and when we make an error in judgment after we have sought knowledge in every channel, we are not held accountable. But when a man intentionally and wilfully submits patients to humbuggery, as I believe was the intention in this case, I can find no language strong enough to be used against him.

The question in the case now before us is, can we operate? I frankly tell you no; for this reason: If we can get above the diseased tissues we can operate, and I think in many cases prolong life. But when we have the disease extending above the cervix, or involving the tissues around the uterus, operations in my opinion are generally useless, or at most palliative. It is stated by some that we may do much by removing as large a quantity as we possibly can of the abnormal tissue, by means of the thermo or galvano cautery, as by this means the hemorrhage is checked for a time. Beyond this, however, I think no good results are secured in these cases. I have seen but very few cases where there has been any reason to believe that any success ultimately attended the operation.

The operation of entirely removing the uterus is now becoming fashionable among surgeons, and you may perhaps ask, why not do so in the present case? I can only say, that to perform this with any advantage you would have to operate very early in the disease, before any of the tissues surrounding the uterus were involved, and before the patient's health became markedly deranged; and I must say that I have never had the courage to operate, so that I may be somewhat behind the age in this department of gynecology. When the disease does become established, removal of the entire uterus may fail to relieve the patient; and even should it prove successful, so far as the patient surviving the operation is concerned, will you give her a longer lease of life! The operation is so formidable a one that I have never performed it in these cases of malignant disease, and I do not know that I ever shall.

I believe that when we have statistics of some

hundreds of these cases of the removal of the uterus for malignant disease, and compare them with an equal number of cases of malignant disease of the uterus which have not been operated upon, that the ones not operated upon will give us the best results. Removal of the uterus in malignant disease is only a slight possibility of cure, and I have not taken kindly to the operation. It may be timidity on my part, if such you choose to term it; but I would rather be among the timid than among the daring, and I am willing to wait until we have more positive knowledge regarding this heroic treatment of cancer of the uterus. Palliative treatment only is then left for us in these cases, in my opinion.

I was very much pleased to notice a recent article by Dr. Reeves Jackson, of Chicago, in which he takes precisely the same ground as I do in relation to these cases, stating his views in a most concise and clear manner.

You must not, however, abandon your cases when the disease has advanced beyond the reach of operative surgery; you can do much toward relieving the sufferings of the patient, and to a very limited extent prolong their days.

In the first place, the intense pain is to be relieved by the administration of opium in quantities, no matter how large they may be, sufficient to relieve the suffering; administering the opium regularly. You have doubtless all heard me declaim earnestly against the use of opium in the management of benign diseases of the uterus and ovaries, because of the danger of establishing the opium habit. But in the malignant disease of these organs, I pursue exactly the opposite course, and establish the opium habit as soon as possible, believing it to be the only way to secure comfort and relief from pain in this most distressing affliction. I have also found that by the use of a tampon of marine lint, the patient could be guarded from these dangerous attacks of hemorrhage; and more than that, the peculiar discharge characteristic of this disease is taken up and disinfected by the tampon—so that the patient is relieved from the irritation which usually follows about the introitus vulvæ, and also from the continuous offensive flow. The tampon should be changed every day, or every night and morning; a skillful nurse can be taught to employ it most effectually. I have found this treatment to afford the patient great comfort. I have also found in quite a number of cases—I think seven in all—of epithelioma which commenced in the cavity of the body of the uterus, that the hemorrhage could be checked for a time by simply removing the cauliflower growth with the curette, and subsequently injecting the uterus with a saturated solution of the chloride of zinc.

As regards the constitutional treatment of epithelioma of the uterus, I have but little faith in any remedies in the advanced stage of the disease. If we could detect the tendency to malignant disease, we might do much towards preventing its development by good hygienic and tonic treatment, especially by the use of iodine and arsenic; and we may even gain something by such treatment in the incipient stages of the disease; but in these cases as we usually find them it avails but little, in my opinion.

In comparison with the case we have just seen,

in which the whole uterine and probably surrounding tissues are involved, I will mention that of a case now in the hospital, in which the disease involves the neck of the uterus alone. In this case amputation of the diseased portion is perfectly practicable and always justifiable. I shall therefore in a few days amputate the neck of the uterus in that case, removing all of the diseased tissues, with the result, I have no doubt, of tending to prolong the life of the patient.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

(Concluded from page 559.)

Dr. Van Harlingen said that with regard to the general treatment of syphilis, the ground had been so well covered by Drs. Ashhurst and White that little or nothing remained to say. There are certain problems, however, that present themselves in connection with the management of late syphilis, which had not been touched upon, and which are yet of great practical importance. One of these relates to the period during which treatment should be continued in cases seen for the first time in the later stages of the disease. For instance, a patient presents himself with a single late lesion or group of lesions, of the skin, or an ulcerated pharynx, a muscular involvement, or a nerve or cerebral lesion. A few weeks or longer may suffice to remove the outward evidence of syphilis; but how long should treatment be continued, not merely to prevent relapse in the original spot, but to prevent possible subsequent manifestation of the disease in some more important spot? The speaker said that his custom in such cases is to touch the lesion with iodide of potassium, beginning with five-grain doses, rapidly increased until the lesion yields or until the limit of tolerance is reached. When the lesion yields, then mercury is to be added to the potash salt, and after a little time the latter is gradually withdrawn and mercury alone is administered for the space of at least six months after the disappearance of all signs of disease. This the speaker considered the safest method of treatment in late syphilis, and in practice he had usually found that it gives the patient permanent relief. Further observation, however, is required on this point; for if syphilis can be taken in hand at any stage and treated with the same probability of entire subsequent immunity as when treated from the beginning, the method and duration of such treatment should be settled. At present, further exact investigations on this point are demanded.

Another important point is the realization of the fact that there comes a time in the history of late syphilitic lesions when specific treatment is of no avail. Specifics will remove the new-cell infiltration which constitutes the lesion, but a cicatrix may be left behind, as in stricture of the œsophagus or rectum, or as a sequela of a gumma of the brain, which is as much a morbid product as the original syphilitic lesion, but is entirely unchanged by the administration of iodide of potassium or other specifics, no matter in how large doses these may be given. In such cases huge doses of rem-

edies are vain. The dose should be rapidly increased, held for a short time, then diminished if found of no avail, or changed for some other form of treatment. Sometimes a simple tonic, as the tincture of iron, will cure when specifics have failed.

Dr. W. R. D. Blackwood remarked that he first saw syphilis and chancreoid on a large scale whilst stationed at Lexington, Ky., in 1863. His division was so affected by venereal diseases as to compel military supervision of houses of prostitution, and he made a personal examination of a large number of women twice weekly for over two months, all diseased females being removed for treatment to a special hospital. He was thus enabled to connect cases in the troops with the source of infection, and to test with certainty the effect of treatment of syphilis prior to the advent of a chancre in men reporting a suspicious intercourse. In no instance did such treatment avert constitutional results. As three regiments of his division were recruited from this city and Schnylkill county, he had additionally, in many instances, an opportunity of following up the after-history of men treated for chancre and chancreoid. He invariably, during the nine years of his army experience, thoroughly cauterized all venereal ulcers of the genitals with fuming nitric acid; and with the exception of a year, during which he followed the prevailing plan of letting chancreoids alone, he always does so, now being satisfied that the sore is not only thus more quickly treated, but that its tendency to auto-inoculate is controlled. Subsequent to cauterization, he used bismuth or similar mild dry powders. He frequently employed common *brown* sugar, which acted nicely. He had tried as an experiment molasses and glucose; and also black and yellow washes, aromatic wine, and the usual routine dressings, but without good effect. Dr. Blackwood, after thorough trial, was satisfied that iodoform was of no value whatever, either externally or internally, in syphilis, chancreoid, or any other disorder. It was offensive to both patients and associates, and was used blindly by surgeons and physicians as a prevailing fashionable remedy. He let buboes alone unless they threatened suppuration, when he poulticed and incised freely. Potassio-tartrate of iron he valued highly, and the reason it failed with most surgeons was because they gave it in small doses—two to five grains. He never gave less than thirty grains—usually a drachm, four times daily. It is the most rapid blood-making ferruginous salt we have; does not constipate, and it certainly excels any other drug in controlling destructive ulceration. He added alum to it if diarrhoeal action set in.

Dr. Blackwood objected to mercurial inunction in syphilis, as dirty, inconvenient, and causative of eczematous disorders. He did not use iodine or its compounds in secondary manifestations, but preferred bichloride of mercury throughout, even in tertiary. In the latter stage he used potassic iodide sometimes, especially in syphilis of the nervous system. He valued stillingia very much, but it must be a good preparation. He saw excellent results from it while stationed in northern Alabama and other southern states for five years after the war. The doctors outside the large cities there were as ignorant as the people generally, but the negroes and old women knew the value of

stillingia, which is the basis of the "Cherokee cure." He always gives the compound fluid extract in full doses, with the mercurial or iodide. Treatment was maintained for three years. He avoided salivation, and believed in the tonic effect of mercury according to Keyes.

Dr. Blackwood liked the hypodermic injection of bichloride, adding to it the chloride of ammonium if the patient did not strenuously object, although the operation is painful. He never had abscesses as a result, and if the needle is deeply buried this accident will not occur. He has seen many of his army patients since the war who are in perfect health, and who have now families free from constitutional taint. As the professional attendant of several houses of prostitution in this city for twelve years past, and from twenty-two years' observation, in which time he had treated a very large number of both sexes of whites, negroes, and Indians, in military and civil life, he was satisfied with his method of treatment as the simplest, the quickest, and the best to insure a permanent cure in any case.

Dr. De Forest Willard said that the treatment of chancreoids beneath the prepuce required extreme care. He had himself tried the plans of cleanliness, and syringing, and packing, and had carefully watched this form of treatment in the hands of others. "Buttonholing" and extensive sloughing had frequently followed, even in hospital practice, where strict surveillance was possible; in private practice, even when the individual realized the importance of strict compliance with directions, the environments were often unfavorable to frequent retracy. He decidedly preferred to have a sore, concerning whose size and tendencies he had seen many errors in diagnosis, open and visible. The removal of a portion of the prepuce, and, as quite frequently possible, the cutting away with it of the sore itself, was a no worse operation at this time than at any other, as the cauterization of the raw edges, during anaesthesia, was painless, and much time was in the end saved.

An apparently contracted prepuce was, as the speaker had shown in a previous paper, an easily remediable condition in young children; but as he had then said, that whenever any symptoms arose referable to this stenosis, "a prepuce freely movable over a normal glans should be secured," so now when the youth has arrived at sufficient years of indiscretion to voluntarily contract a venereal sore, and had never been able to accomplish retraction, it was sufficient evidence that actual narrowing existed, and the sooner that a healthful standard was reached, the better would be the result. He certainly would not dare to retract the prepuce forcibly and cauterize, as Dr. A. had suggested. It is claimed that chancreoids are not specific sores; yet all who speak from large experience in dealing with them will acknowledge that they are vicious, destructive in their tendencies; that they are not self-limiting, but that they are checked only by the resistant power of the individual, either aided or unaided by remedial measures. Let the patient be non-resistant from any cause, and just in proportion to his disability will be the destruction. This is not the course of simple inflammation, hence it should be met actively and vigorously.

Each one has his favorite caustic; he preferred the acid nitrate of mercury, but would state that the worst case of salivation which he had ever produced, was caused by applying it to a chancre upon the os uteri, the liquid being permitted carelessly to trickle down the posterior vaginal wall.

In regard to tertiary syphilis, it had always been his practice to substitute a tonic course of treatment for the specific remedies, during one or two weeks of each month.

Dr. Packard thought that the term "specific" might justly be applied to the chancre or soft sore, by reason of the peculiarities in its character and course, distinguishing it from the initial lesion of syphilis, as well as from other sores. He thought the excision of such soft sores unphilosophical and injurious, as simply enlarging the extent of diseased surface; moreover, as the action was local only, and never productive of constitutional symptoms (of syphilis), there was no adequate object to be gained by such a course. He preferred the milder caustics, and had used with advantage the stick of nitrate of silver, dipped in fuming nitric acid; this seemed to him more efficient than the nitrate alone, and perhaps less severe than the acid alone. He believed chromic acid, and the chloride of zinc, either in saturated watery solution or in paste, answered very well.

He advocated slitting up the prepuce to expose chancroids; believing that it is better to know just what we have to deal with, and to obtain ready access to the whole of the affected part. The preputial sore thus formed is under control from the outset, and need not give any anxiety.

As to sloughing sores, and their treatment by means of powdered white sugar, Dr. Packard stated that he believed he had been the first to use this article as a dressing in cases of hospital gangrene, at the suggestion of the late Dr. Le Conte, in 1864. The results obtained had been published in the *American Jour. of Med. Sciences*, for January, 1865. Dr. Packard was then acting as consulting surgeon to the U. S. A. Hospitals at Haddington and at Beverly, N. J., and a very large number of bad cases of this kind were under care at both places.

He thought the corrosive sublimate dressing recently proposed, might be of use in sloughing chancroids, and had had such favorable experience with eucalyptol in cases of gangrenous stumps and other wounds, that it seemed to him worthy of trial here also.

There were many other points of great interest in the subject under discussion, but he had nothing to add to what had already been said by other speakers.

Dr. Ashhurst closed the discussion.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, March 6, 1884, the President, R. A. Cleemann, M. D., in the chair.

Dr. Wm. Goodell made the following

Correction of a Misstatement:

"At the last meeting of this society I made a misstatement with regard to that distinguished ovariologist, Mr. Tait, which I greatly regret, and

which I wish here to correct. I was misled by some remarks made by Dr. Sutton at the last meeting of the American Gynecological Society. These were so reported as to convey to my mind the impression that Billroth was the only European operator who did not refuse any case of ovarian tumor, however unpromising it was, and that Mr. Tait—to borrow Dr. Sutton's language—"does not remove many large tumors, those which weigh from sixty to sixty-five pounds, with extensive adhesions," etc. In quoting this, by a careless slip of the pen, I changed the word 'many' into 'very,' and in addition, I wholly misapprehended the purport of the above sentence. Dr. Sutton has since, in the *Medical News* of February 23d, explained that he did not mean that Mr. Tait selects his cases, for he is 'not aware that this British ovariologist refuses to remove a tumor because it is large;' but that 'Mr. Tait has the largest line of ovary and tube cases and the shortest line of big ovarian cysts, of any man I (Dr. Sutton) visited in Europe.' In making this correction here, I wish to repair the injustice which I unwittingly did Mr. Tait before this society.

Dr. Goodell then exhibited an

Extra-ovarian Cyst,

with the following history: The lady, aged 28, and the mother of four children, had a miscarriage early in last October. At that time her family physician discovered the tumor. It slowly grew, but gave the lady so much inconvenience from pain and pressure that she was brought to his office late in the following December. It was not large, but was very sensitive, and was diagnosed to be an ovarian tumor. Both ovaries were removed early last February, and the lady recovered promptly. The peculiarities of the cyst were to him unique. The ovary lay to one side of a thick-walled cyst, and at such a distance from it that the cyst could have been removed without injury to the ovary. The latter was, however, extirpated along with the cyst, because it was diseased. Hitherto all par-ovarian cysts which he had encountered were thin-walled, and contained a clear fluid. But this one had thick walls, and contained a turbid brown fluid. It started from the left broad ligament, and was adherent to the bladder, omentum, and abdominal wall. Another point of interest was the fact that the right ovary had doubled its size from follicular degeneration, and yet pregnancy had taken place.

Dr. Robt. P. Harris suggested the possible existence of a third ovary, as the starting point of the tumor. He also thought that the presence of a third ovary might explain the persistence of the menstrual flow in some cases, after the operation of double ovariectomy.

Dr. Goodell also exhibited a

Coccyx Removed for Coccygodynia.

The patient had met with a fall down stairs some years previously, and the injury was followed by a vaginal abscess of some kind. She had all the classical symptoms of a very bad coccygodynia, and had fallen into a nervous condition which bordered on insanity. Dr. G. had intended merely to sever the nervous attachments of the coccyx by the sweep of a tenotomy knife; but after the patient had been put under ether, the

tip of the bone was found unnaturally movable, and giving distinct crepitation. The loose bone was, therefore, removed, and as the articulating surfaces were found rough and denuded, the whole coccyx was removed by bone forceps. Great relief followed this operation.

Although he had seen very many cases of coccygodynia, this was the first case on which he had operated. In a very few traumatic cases, he had wished to operate, but was not permitted to do so. The vast majority of these cases are, in his experience, those of nervous or neuralgic coccyx, and they get well in his hands under rest, massage, electricity, and appropriate constitutional treatment. The great difficulty, in cases of severity, is to decide between the nervous mimicry of the disease and pure traumatic coccygodynia, in which positive lesions have been sustained and their effects have not yet passed away—as for instance in a sprained or a fractured coccyx, or in a rheumatic, a gouty, or an inflamed coccyx. There is yet another difficulty in the way of diagnosis, for sometimes an injury received in an hysterical woman is followed by local nervous phenomena, which will last long after the original lesion has been cured. For instance, on one occasion, he had been so greatly deceived in the diagnosis between traumatic and nervous coccygodynia, as to make him very cautious in resorting to the use of the knife. A highly intellectual lady, who spent her leisure in reading metaphysical works, received an injury to her coccyx by the sudden "bucking" of the horse on which she was mounted. She was, at that time, suffering from nervous prostration, and the blow started up very exacting coccygeal symptoms. Dr. Goodell found retroversion and a prolapse of both ovaries. These dislocations were remedied, and the patient put on a vigorous constitutional treatment; but she grew no better, and an operation was proposed and agreed to. As soon as the day and the hour were decided upon, she lost all pain in her coccyx, and has not since had a return of it. This happened about six years ago. On another occasion, he saw a very obstinate and severe case of coccygodynia, which he had been treating unsuccessfully for a long time, and which had a traumatic history, quickly disappear under an exciting family jar. In view of this experience, he believed it always safer at first to consider coccygodynia as a local expression of a general neurosis, and to treat it accordingly.

Dr. J. H. Packard asked why Dr. Goodell had preferred the bone nippers to disarticulation in the first case.

Dr. A. H. Smith asked if Dr. Goodell had removed the entire coccyx. (Dr. Goodell was not sure, but thought so. There had been an abscess in connection with the injury, and the bone was dead and somewhat necrosed; he had cut off one piece with the nippers and then disarticulated the remainder.) Dr. Smith continuing, said there had been suppurative action probably following ankylosis. Such a condition might result from injuries received in labor, or from falling astride a chair-back or a rail. Most cases were reflex hysterical or uterine pains, as will be proved by the freedom from tenderness when the finger is pressed on the coccyx when making a vaginal examination. He has never removed one, because

he has seen such poor relief from the operation in any cases that have come under his observation. Why should relief come unless all the nerves and other painful tissues be also removed? He will be glad to hear the result of the operation in the case reported by Dr. Goodell this evening.

Dr. Packard demonstrated to the Society a new method of applying *Axial Traction* to any ordinary obstetric forceps. The device consisted of two steel hooks arranged to catch in the fenestra of the blades of the forceps, and terminating in rings through which a wooden handle is to be passed. The handles of the forceps are to be lashed together.

Dr. Smith remarked that Dr. Tarnier's first suggestion was to pass a cord through holes drilled through a widened portion of the blades at the point at which handles are now attached. The hooks exhibited by Dr. Packard did not draw from the right point, and he thought there would be difficulty in adapting them when the head was high up.

Dr. Goodell thinks that Tarnier was anticipated in the cord attachment by another French physician.

Dr. B. F. Baer read a paper on

The Significance of Metrorrhagia About and After the Menopause.

Metrorrhagia recurring about the menopause is as likely to be the result of disease of the uterus or its appendages as it is at any period previous to that time. The popular belief that floodings at the change of life are physiological often results in harm. That the blood-loss is depuratory or critical, and that it protects the vital organs from injurious congestion, is erroneous. Where health exists, the cessation of menstruation will be attended by no more aberrations of function than are seen in its establishment. An analysis of twenty-two hundred cases treated in hospital and private practice shows that nearly the same number of women sought service during the establishment and the decline of menstruation, and it further shows that the numbers rapidly increase as the period of greatest fecundity is reached, and decline after it is past.

Epithelioma of the cervix may result from injury of that organ, but also requires some peculiarity in the structure of the tissues which renders them susceptible to an induced dyscrasia. When a woman, in the midst of the fertile period, suddenly ceases to bear children, there is often some local cause for it. There is some causative relation between acquired sterility and cancer. It is safer to believe the disease of local origin, for we will then endeavor to discover and remove all sources of irritation, and possibly prevent its development. Detailed histories of a number of cases are given to illustrate the truth of the positions assumed. Where the menopause is retarded beyond the usual period, the cause can often be found in some diseased condition connected with the sexual system, and, as a rule, it is an old-standing trouble. When metrorrhagia recurs after the menopause has been fully established, it is almost invariably the result of a pathological change in the tissues of the uterus.

Dr. Goodell agrees almost wholly with what Dr. Baer has said; he thinks the dangers of the men-

opause much overrated. Cancer and fibroids of the uterus occur more frequently at that age than any other, and have caused the popular dread. Although hemorrhage is always pathological, its cause cannot always be discovered, and in this dodging period serious hemorrhage may occur and no dangerous condition exist. He would like to believe that cancerous growths had a benign incipency, but cannot go so far. The microscopists make many mistakes in ascribing malignancy to growths removed from the uterus. Dr. Goodell then gave a number of cases, in which experienced microscopists had given prognoses of early fatal termination, based upon the cell-formation of growths removed from the uterus, but these cases had recovered, and showed no evidence of any diseased condition. With regard to the small proportion of cancerous growth following laceration of the cervix uteri, the doctor called attention to the large number of Irishmen using clay pipes, and the small number of lip-cancers, and yet it is universally acknowledged that the use of a clay pipe is the principal cause of such growths.

Blood-letting is practiced very freely in Turkey and the East, and women as a consequence get very stout; such are more liable to profuse hemorrhage at the dodging period.

Dr. Wm. T. Taylor reported a case of

Malarial Poisoning in a New-Born Babe.

We have frequently observed fevers of a malarial type in very young children, in some even during the first year, which were ushered in by a convulsion or other prodrome, without a rigor, as occurs in older persons, and their character is only recognized by a repetition of the attack in a day or two. But the youngest subject of this disease which I have met with is the following case:

Mrs. A. R., during her second pregnancy, was affected with malarial fever; and although she was then residing at the seashore, was obliged to take occasional doses of quinine to control it. She re-

turned to her city residence at the end of the season, but continued using quinine from time to time until the end of her utero-gestation, which was completed in November last, when her babe was born. Her labor was natural and easy, and she had no unfavorable symptoms. The child appeared healthy, was of good color, but was smaller and feebler than her first-born at its birth. As she had a good supply of milk, it soon drew the breast quite vigorously.

About one week after its birth the nurse called my attention to "weak spells" which it had occasionally, accompanied by coldness of the skin, a feeble circulation, and prostration, which continued for fifteen or twenty minutes, and were followed by a clammy perspiration. By the application of heat to the body, and giving it a little brandy and water or other stimulant, it would revive.

I observed that these "spells" had a periodicity, occurring every two or three days; and considering them malarial, I gave the mother quinine and valerianate of iron, which, acting therapeutically through the milk, soon caused the "spells" to cease, and the babe became well and fat. I also gave it small doses of the elixir of cinchona for several weeks.

This child must have contracted this disease whilst in utero through the placental circulation; for being born in a perfectly healthy locality, it was not exposed to any external malarial influence.

When labor began the quinine was stopped, and was not resumed until the condition of the child required it, when it soon showed its anti-periodic action by completely arresting these "weak spells," for now the child is perfectly well.

Dr. R. P. Harris related a case of parallel character, which had occurred some years ago in a malarious neighborhood. The mother was under treatment before labor. The child had chills and fever when quite young, and was treated through the mother.

W. H. H. GITHENS, M. D.,
Secretary.

EDITORIAL DEPARTMENT.

PERISCOPE.

Dietetics in Disease.

Apropos of our editorial on "Diet Cure" (cur. vol., p. 373), we note as valuable, the following remarks on dietetics delivered before the Medical and Chirurgical Faculty of Maryland (*Med. News*, April 26, 1884), by Dr. William Pepper.

Remembering the thoughtful little work, *Health, and How to Promote It*, recently published by the President, Professor McSherry, Dr. Pepper said he was led to hope that some practical remarks upon the subject of dietetics might not be without interest. On reviewing what he had prepared, however, he felt that the title selected was somewhat inappropriate, as he had dwelt more upon the relations of dietetic errors to the production of disease than upon the actual value of diet during

the disease. Although the subject has not always claimed the attention which it merits, yet, on the whole, we must acknowledge that amidst the currents and counter-currents of medical opinion during the past decade there has been a constantly growing appreciation of the value of dietetics; indeed, we may safely assert that it is becoming recognized that in very many conditions of impaired health and actual disease successful treatment depends chiefly or exclusively upon proper diet and regimen. He believed that from a proper study of the wide range and varied character of the morbid symptoms resulting from the gift of food abused, and the wonderful remedial effects of special forms of diet, it would appear that it is in this line more than in any other that the greatest triumphs of therapeutics are to be won in the near future. In estimating the influence of the factors of our physical life upon the development of the

individual or race, too much importance has been attached to climate, and far too little to diet and personal hygiene. For the establishment of the laws of dietetics and hygiene we are concerned only with the average man, not with those exceptional individuals in every community who display the highest physical and intellectual health whilst pursuing courses of life admissibly injurious.

In India and Australia we have seen the experiment of subjecting large numbers of Anglo-Saxons to climatic conditions diametrically opposite to those familiar to that race, and the result seems to be that with suitable diet and regimen its characteristic health and energy will not be impaired. In this country a more complicated experiment is being tried. A nation recruited from all quarters of the globe, a vast territory—wide varieties of soil and climate—the gift of freedom, personal, political, and pecuniary, to be borne by millions heretofore comparative strangers to these blessings. Can we wonder that during the fierce contest to be waged with strange and untried climatic, industrial, and social conditions, many curious effects, physical as well as social, have been developed? The so-called typical American, with his pale, sallow face, and tall, slender figure, full of the irritable restlessness bred of nervous dyspepsia, certainly differs widely from his English, Irish, or German ancestors, and the interesting question arises whether his physical peculiarities are inseparably dependent upon our climatic conditions, or upon other and transient influences. Prof. Pepper stated his deliberate conclusion that it is to the latter conditions almost exclusively that we are to attribute these results. He indicated the abuses of various articles of food and drink which are the undoubted cause of this state of things, and reiterated his opinion that this was the cause of most of the physical peculiarities commonly assigned to the American climate. He believed that with due regard to the conditions, there is no more favorable climate upon earth than our own. He deprecated, too, the excessive share which has been attributed to overwork in the production of many forms of nervous exhaustion. In his own experience, cases really induced by this cause were rare, and in the vast majority an amount of work entirely consistent with long-maintained health is rendered destructive by reckless disregard of the laws of health. It is true that the conditions of our higher forms of work in America are more difficult than in older and better organized communities, but a study of the habits of professional and business men in other countries has convinced him that the important question is really "How to live while working."

If it were possible for all to appreciate correctly their physical condition and capacity at the outset, so as to adapt their method of work to their physical requirements, we should see quite as much or more work done with infinitely fewer instances of (physical) disaster. The velocity and range of a projectile vary directly as the initial power, and inversely as the mass to be moved. In its application to the human body this is a most pregnant truth. To adjust the actual weight of the body to the physical powers of the individual, and to render these innumerable minute processes

as easy and complete as possible, is the aim of dietetics and regimen, and the common-sense policy of every man who aspires to work to the best advantage. The enduring capacity of a man is measured by his weakest organ only. We are able by intelligence and self-restraint to spare this weak spot, and enable ourselves to tax our stronger parts to their full extent. The weak spot is commonly at some point in the assimilative process, but by no means *usually* in the stomach or intestines, or, at least, not manifested there most clearly. Whilst the original cause of the trouble may lie there, it very often shows itself in the subsequent changes, whether interstitial or metabolic. For instance, the absence of well-marked attacks of gout long blinded our eyes to the fact that the gouty diathesis is widely prevalent in this country. It is difficult to define gout, but it seems necessary to include under this head all that large series of cases, with or without marked gastro-intestinal disturbances, in which there is obstruction to and deficiency of the ulterior assimilative changes before the food reaches its final fully digested forms.

He wished to call special attention to the great frequency with which, out of the presence of one or more of the causes, there is gradually evolved the complicated condition to which it is becoming the habit to apply the name of neurasthenia, and which is too often regarded as the result of pure nervous exhaustion from overwork, and therefore requiring simple tonics, rest, and high feeding. Such cases, after they have been brought up to a certain point, require a protracted course of well-ordered regimen, dietetics, and exercise. Of course, one special method of treatment can be applicable only to one special group of cases; but it is the work of the skilled physician to discover to what group any special case belongs, and to select the method of medication best adapted to it. He alluded to the special methods employed by empirics—the system of Pressnitz—and those well-known methods employed at popular spas, the waters of which are totally inert. Although unscientifically employed, these methods do succeed in certain cases which have baffled the ordinary medical resources, and prove that remarkable results may be obtained by a systematic and oftentimes extreme use of the simple agents—rest, exercise, food, drink, and bathing.

He spoke of the remarkable treatment called Schroth's Cure, now practiced at Lindewiese, in Germany, which consists in an artificially-induced attack of continued fever, developed by long-continued abstinence from water (thirty-six to ninety-six hours), and great restriction in diet and violent exercise, alternating with free stimulation. While undoubtedly hurtful in many cases, even this has been known to effect remarkable cures in constitutional syphilis, rheumatism, etc.

He remarked on the revival of the hot-water mania, and said that the truth about it is that there are not a few cases of dyspepsia and lithæmia, of certain types of rheumatism, and gastro-intestinal catarrh, in which this remedy, combined with other simple hygienic measures, is the best cure. While hot water, taken as its advocates advise, is capable of doing harm, it will do good in so far as it discourages the use of tea and coffee. We are advancing towards a time when

for each carefully-diagnosed group of cases there will be a scientifically adapted diet.

In illustration of these views, Prof. Pepper proceeded to give in detail several cases of great interest, in which patients suffering from severe disorders were greatly benefited, chiefly by attention to dietetics. One of his cases was a woman of sixty five, with all the symptoms of advanced fatty degeneration of the heart. Noticing that she had steadily increased in weight during her sickness, and was very fleshy, he put her on a reduced diet, and with proper medication effected entire relief of the symptoms in about nine months, during which time her weight decreased from one hundred and sixty-five to one hundred and forty pounds.

Systematic reduction is to be instituted only when symptoms clearly indicate it. When reasonable reduction of diet fails to produce a marked diminution in the weight, the patient has probably not too much weight. When body weight falls rapidly, even if symptoms subside commensurately, check it early to avoid debility. Care must be taken in reducing weight, lest a marked reduction might favor the development of some latent morbid tendency, such as tuberculosis, cancer, or scrofula. A reaction has commenced against the indiscriminate stimulation in disease advocated by Todd and his followers. In acute disease, to push stimulants and concentrated food beyond the power of the patient to assimilate, puts an additional burden upon his already weakened system. In chronic diseases, restoration of power, relief of symptoms, etc., can only be accomplished by thoroughly adjusting the diet and hygiene to the altered conditions of the state of nutrition, and then as far as possible directing our remedies to the actual indications.

Clinical Remarks on Dropsy.

Dr. G. G. Roy thus writes in the *Southern Med. Record*, January 20, 1884:

The case I now present you is a typical one of dropsy, and belongs to a class of cases more empirically diagnosed and treated than any I can now call to mind. And why is this? The reason is obvious: Sight is lost of the fact that, pathologically considered, dropsy is not the disease *per se*, but the symptom and result of organic lesion, or disease.

When brought into contact with a case of this sort—too frequently—the plan of the average practitioner in dealing with it is about that of the most unmitigated dropsy quack, with which the world is now flooded. He sees the patient is swollen—it may be local or general; he pronounces, without hesitation, "It is a case of dropsy," and all we have to do "is to get rid of the water;" and this he essays to do—and sometimes succeeds, by the use of active diuretics and purgatives—and he pronounces his patient cured.

Now, gentlemen, I wish to impress this point upon you—and hope you will never forget it—that getting rid of the water, or reducing a dropsy, is *not* curing the disease.

Another fact—of greater importance—I would impress upon you is, that when you have a case of dropsy to deal with there are three vital organs you must carefully and searchingly interrogate before you can properly diagnose and treat it.

These are the liver, heart, and kidneys; in one or more of these you will find the obstruction which dams the blood, from which the effusion or dropsy comes. I have mentioned them in this order because, in our malarial Southern country, the obstruction is in the liver (fortunately for the patient) more frequently than in either of the others.

I would, also, like you to remember that dropsy may be *active*, the result of acute inflammation, or *passive*, the result of chronic or continued obstruction of the veins. In *liver* dropsies you will generally find the swelling in the abdomen; in *cardiac* or *heart* dropsies, in the lower extremities, especially the feet; and in *kidney* dropsies, especially from albuminuria, in the eyelids and face. To an experienced observer, the doughy puffiness of the eyelids and face in this last affection is almost pathognomonic.

You have a diseased liver, heart, or kidneys, upon which the dropsy depends, and of which it is a *symptom*. Now, what is the rational plan of treatment for its cure? The *dropsy quacks* have learned that drastic purging of the bowels or kidneys will oftentimes reduce a patient so swollen that the integuments of the lower extremities have split or burst—and it is a shame upon the American people to say it, but it is true that this bit of knowledge is daily extending their fraudulent fame, and filling their purses with ill-gotten ducats. But the quack stops here; he can go no further; he does not know whether it is a liver, a heart, or a kidney dropsy, nor does he care—the sooner the dropsy re-accumulates, the sooner his purse is replenished.

But with you, gentlemen, it will not be so—it *must not* be so. Having diagnosed the cause of the dropsy—the organ diseased and its nature—you, too, by the judicious use of purgatives and diuretics, will endeavor to relieve the dropsy; having done this, you will not stop and pronounce your patient cured, but will proceed at once to remove the cause by relieving the obstruction of the veins wherever located, whether it is with the liver, the heart, or the kidneys, and at the same time improve the quality of the blood.

This woman's dropsy evidently comes from obstruction of the portal circulation from a hardened liver, the result of chronic malarial poisoning, and we will place her upon Dr. Alonzo Clark's pill of

R.	Hydr̄g. chlo. mite,	gr. xij.
	Pulv. digitalis,	gr. xij.
	Pulv. scillæ,	gr. xij.
M. ft. pills or capsules No. 12.		
Sig.	One three times daily.	

And every other night a pill of

R.	Elaterium (clutterbucks),	gr. j.
	Ext. jalapæ,	grs. xij.
	Pulv. digitalis,	grs. xij.
	Pulv. scillæ,	grs. xij.
M. ft. pills or capsules No. 12.		

You will omit the pill of the first R. the night this is given.

After we reduce this patient, which we may reasonably hope to do in a week's time, we should address our treatment to the hardened liver, which has obstructed the portal circulation and caused

the dropsy, and for this purpose I have found nothing better than this :

R. Hydrg. bichlorid,	gr. j.
Ammo. murias,	ʒ iij.
Elixir simpl,	q. s. ʒ iv.

M. ft. sol.

Sig. Teaspoonful three times daily in wine-glass of water.

I hope you will remember that, while using this treatment, it is all-important that you should build up the blood with the most soluble ferruginous preparation. If not, you may certainly expect the dropsy to return from the slightest imprudence of diet or temperature.

The liver of the chronic drunkard is peculiarly susceptible to the influences which produce this kind of dropsy; and in these cases I have used Prof. Robley Dunglison's ferro-saline repeatedly with most signal relief. The ferro-saline is a combination of sulphate of magnesia and sulphate of iron.

Transfusion of Blood in Albuminuria.

From the *London Med. Times*, March 15, 1884, we learn that the *Gazette Hebdomadaire*, for January 18, publishes what it regards as a very important paper, bearing this title, read by Dr. Dieulafoy, of the St. Antoine Hospital, at the Hospital Medical Society. He first draws attention to the remarkable fact that the lives of persons dying from hemorrhage have often been saved by the injection of so trifling an amount of blood as 100 or 150 grammes; and he relates a case in point, in which a person dying of an epistaxis which resisted every measure resorted to during 20 days, was at once rescued from danger by the transfusion of 120 grammes of healthy blood. Such a case as this, however, differs from those cases of traumatic hemorrhage (consecutive to operations or to delivery), in which the case is purely accidental; for it is brought about and maintained by an altered condition of the blood, of an ill-defined nature, termed for want of a better name *hemophilia*,—a dyscrasic condition in which perhaps the structure of the small vessels is at fault, but in which the blood is certainly no longer possessed of its normal properties. Life has been saved by transfusion in several cases of this kind, not merely because the blood supplies an additional amount of fuel to an expiring lamp, but because it plays the part of an agent which is to some extent hæmostatic. The addition of so small a quantity of healthy blood serves to modify advantageously the composition and fabrication of the blood that seems to have lost its principal qualities. "In such a case," Dr. Dieulafoy observes, "the infused blood acts, I repeat, as a hæmostatic agent. It is a powerful modifier, rapidly transferring a dyscrasic condition of long date by a special action, the mechanism of which is as yet ill-known, but with a result well calculated to attract attention. All the importance of these facts, which seem to me to dominate the history of transfusion, has not yet been sufficiently brought out. A closer investigation of them has led me to ask, like many others for that matter, whether there is not reason for the application of transfusion to some dyscrasic conditions in which alterations in the blood seem to play an important part. May not dyscrasic hemorrhages, uræmia, and Bright's

disease, diabetes and acetonaemia, the paroxysm of gout and rheumatism, derive benefit from this modifying agent, the effects of which we are as yet ignorant of, because they have not been sufficiently investigated?" In order to render an extended therapeutic application of transfusion possible, Dr. Dieulafoy has contrived an apparatus, which he believes will much simplify and facilitate its application. An illustrated description of it, as laid before the Académie de Médecine, is contained in the same number of the *Gazette Hebdomadaire*. In the present paper he relates three cases of Bright's disease in which transfusion was performed; but he admits that nothing conclusive can be decided from them. They however establish the innocuity with which injections of 120 grammes of blood may be performed, even in the later stages of Bright's disease; and also the temporary amelioration that may be obtained, even when the lesions are of the most formidable character.

Operation In Spinal Caries.

Dr. Richard Davy thus writes in the *London Medical Times*, January 19, 1884:

I have read Mr. Treves' paper on "The Direct Treatment of Spinal Caries by Operation," brought before the Royal Medical and Chirurgical Society of London, and can endorse his views to a practical extent, as evidenced by my own practice. From my own surgical experience, and from facts observed at the mortuary, I have learnt to view with slight favor the opening of abscesses in connection with vertebral disease, and have taught that, as a rule, any such interference is fraught with inconveniences both to the patient and surgeon.

A man, æt. 38, was admitted into the Westminster Hospital in May, 1879, suffering from diseased lumbar vertebrae with deformity, associated with a large psoas abscess, which had burst below Poupart's ligament on the right thigh. I wished to ascertain, by making a dependent opening in his loin, if good drainage might not assist in promoting a cure.

On May 29, 1879, having had a silver probe specially made, twenty inches long, I passed it through the abscess opening in Scarpa's triangle, along the sheath of the psoas muscle, towards the right loin with care; and without any difficulty I could feel exposed bone. Having withdrawn the probe, and made a short bend at its point (45°), I reintroduced it along the psoas sheath, until it touched the top of the abscess-wall, directing the point of the probe towards the loin. I then cut down on it, introduced my forefinger through the lumbar wound into the abscess sac, felt the denuded bone, and washed out the detritus with a stream of warm water, through the tunnel from the right groin to the loin. The lumbar wound was maintained open by a drainage anchor. The patient was discharged with both wounds healed; but the old abscess-opening in the groin seemed inclined to re-open on his assuming the erect posture. When compulsorily pressed to open a psoas abscess, I have always chosen the loin as a point of selection; being unable to see why a lumbar abscess should have the honor of exemption from ordinary surgical custom; viz., a large dependent opening for the promotion of cleanliness and good drainage.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—The applications of iodoform in dental surgery are set forth by Dr. C. F. W. Bödecker in a reprint from the *Independent Practitioner*.

—An urgent note of warning against the opium habit is sounded by Dr. A. P. Meylert, of New York city, in an address published by G. P. Putnam's Sons. The author says :

It should be understood that opium habituation means death—mental, moral, and physical. Every one who cannot instantly drop it, is drifting towards destruction. He does not see it perhaps. Like the Rhine boatman gazing at the vision of beauty upon the cliff above him, he is swiftly dashed upon the rocks below.

—"An Address on the Duality of Ma'sn Being," by Dr. G. R. Scriven, of Hanging Rock, Ohio, appears to us considerably behind the age. Nothing can be more contrary to the doctrines of modern science than such a statement as this :

All our studies in physiology and pathology point back to a period in the history of the race, when man was absolutely perfect in all the elements and parts of his being; when he was without the taint of disease, and hence could not have been subject to sickness or death—a period when to the physiologist he was a model of absolute physical perfection.

The writer of that could not have read any works later than the eighteenth century.

BOOK NOTICES.

Clinical Lectures on Mental Diseases. By T. S. Clouston, M. D. 8vo., pp. 550. H. C. Lea's Son & Co.

The author of this volume has long ranked among the most eminent Scottish alienists, and the English edition has met with a ready reception. The revision for the American market has been made by Dr. C. F. Folsom, of Boston, who has added an appendix on the laws of the United States and the several states regarding the custody of the insane.

The text is in the form of a series of lectures, nineteen in number, and is illustrated with a number of handsomely executed color plates. The classification is peculiar, mental diseases being included in groups characterized by mental depression, mental exaltation, states of alternation or periodicity, states of delusion, of enfeeblement, of stupor, and of defective inhibition. Besides these, lectures are devoted to such definite diseases as general paralysis, epileptic, traumatic, syphilitic, and alcoholic insanity, that brought

about by masturbation, the puerperal state, adolescence, senility, etc. The last lecture is on the medico-legal and medico-social duties of physicians with relation to the insane. We have been much pleased with the work, and regard it as a treatise of great merit.

Diagnosis and Treatment of Diseases of the Heart.

By Constantine Paul. Translated from the French. New York, Wm. Wood & Co.

The French are celebrated for accuracy in diagnosis and vagueness in therapeutics, and this volume is a fair representative of their school. It is written (or translated) with less ease of style than most French writers display, but presents a large assemblage of useful facts. It is a member of Wood's Library of Standard Medical Authors, and will be found a valued addition to it.

Post-Nasal Catarrh and Diseases of the Nose Causing Deafness. By Edward Woakes, M. D. 8vo., pp. 224. Price, \$1.50. P. Blakiston, Son & Co.

The author of this volume is a well-known aural surgeon in London, and his volume is a practical and useful treatise. It treats of catarrh generally, both acute and chronic, its etiology, hygienic management, diagnosis, and treatment. This is followed by chapters on chronic pharyngitis, hypertrophy of the tonsils, stenosis of the nasal fossæ, and the relation of the latter to diseases of the ear and deafness. A few illustrations accompany the text, and the manufacture of the volume is throughout satisfactory.

The Physician's Combined Day-book and Ledger.

By H. T. Hanks, M. D. Half-bound Russian, \$4.50 and \$5.50. For sale by J. H. Vail & Co., New York city.

In the announcement of this blank book, it is correctly observed that the least possible expenditure of time in keeping the accounts legibly and correctly, and the use of as little space as is consistent with accuracy and specification, are the two important factors of a physician's day-book or ledger. The author claims to have arranged in this book the most exact and labor-saving system of book-keeping yet devised for the use of a physician. While his plan is a simple one, it is, in our opinion, too simple. It is, in fact, nothing but the debit and credit columns of the ordinary single entry day-book running across the page instead of down it. There are no columns for totals, for balances brought forward, or for other items of this kind, essential to an accurate set of books. It impresses us that in the desire to simplify, the author has sacrificed convenience and completeness. We can speak favorably of the manufacture of the book, ruling, paper, etc.

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GONORRHOEA.

At its meeting on April 23, the Philadelphia County Medical Society was regaled with a most instructive discussion on the subject of Gonorrhœa. This disease receives so little thought from the profession, its treatment is of such a routine nature, and so many false and damaging statements are published concerning it, that the discussion in question assumes very great importance.

The opening remarks were made by Dr. J. William White, who, since the death of Dr. Maury, has had annually more experience in venereal diseases than any other man in Philadelphia.

The two most important points that he made were, 1. That you cannot abort true gonorrhœa; 2. That it is not by any means the simple, harmless disease that it is usually considered to be.

The first point is an exceedingly important one, in consideration of the numerous papers on the abortive treatment of gonorrhœa which have been published recently, more especially in New York. Dr. White considers it impossible to cure a case of genuine acute inflammatory urethritis in less than from three weeks to one month. He recognizes a variety of the disease, to which he gives the term "irritative or abortive," and which will be found in about five or six cases out of every twenty or thirty. The initial symptoms here are the same as in true gonorrhœa; there is the same redness of the meatus, the throbbing of the penis, ardor urinæ, and mayhap some discharge, coming on after sexual intercourse. If left to itself, this abortive type of the disease will get well in a few days; and it is in these cases, no doubt, that the abortive treatment of gonorrhœa has gained its notoriety.

That it is by no means a simple and trifling complaint was fully evidenced by the cases reported. One of a healthy, hearty man, who contracted his first gonorrhœa; the inflammation extended until a severe peritonitis ensued, and the man died in thirty-six hours. Dr. Forbes related a case, also in a healthy man, wherein the inflammation traveled up the left ureter, and reaching the kidney, the man died of nephritis, when, upon post-mortem, the left kidney was found to

weigh sixteen ounces, and it was riddled by sixteen abscesses. Other cases were cited which proved, in most unmistakable terms, that gonorrhœa is a disease to be dreaded; and we feel sure that every man who was present at this meeting will hereafter regard the disease with much more fear than he has hitherto been accustomed to entertain for it.

Another point of vital moment upon which Dr. White very strongly insisted, was that gonorrhœa was not a specific disease; that is to say (and it is well to have a very clear understanding of what he means by this term), that the fact of a man having gonorrhœa is not proof positive that he has indulged in connection with a woman who has the disease. Any muco-purulent discharge, that is, any discharge in the vagina which has pus in it, may, according to Dr. White, produce a genuine gonorrhœa; it is not necessary to have a pre-existing gonorrhœa. Some men hold that simple acrid vaginal or uterine discharges can produce urethritis or gonorrhœa; their opponents have confronted them with the immunity of married men, since the majority of married women have some acrid vaginal or uterine discharge. Ricord has endeavored to meet this objection with his theory of acclimation, but Dr. White goes further, and says that in his opinion the absence of pus from these discharges is the cause of the immunity, since the discharge must be purulent to be infectious. Hence, in Dr. White's experience, a much larger proportion of cases of gonorrhœa are contracted from mistresses and from what might be called promiscuous intercourse, rather than from prostitutes, who have learned scrupulous cleanliness as a matter of business.

Dr. White was asked by Dr. Shakespeare how he reconciled this teaching with the fact that very often there was an erosion or ulceration of the os or cervix uteri in the woman, discharging pus, and yet the husband failed to contract gonorrhœa. Dr. White was compelled to admit that this was the strongest argument that could be raised against his theory, and it was not satisfactorily answered. While it is, as we all can easily see, of the utmost importance to the welfare and hap-

piness of families to know whether gonorrhœa is or is not a specific disease, yet we must conclude that the matter is still doubtful. The fact that comparatively few cases are contracted from prostitutes, because they have learned habits of great cleanliness, is not an argument against its specificity; for this very cleanliness would remove the specific poison of gonorrhœa, as it would the specific poison of any other disease. Cases such as we sometimes see reported in our journals, where the disease has been contracted from dry gonorrhœal discharge lying dormant on the pants or the shirt or on a rag, and subsequently conveying the disease to an innocent party, Dr. White receives with a great many grains of salt, inclining to regard them as fabrications to hide the true origin of the disease.

Therefore, we would say in conclusion that the non-specificity of the disease is not yet proven, but that two very important points have been elicited by this discussion:

1. The impossibility of aborting the disease; and,
2. The imminent dangers to life it may entail.

Dr. White promises to talk about the treatment of gonorrhœa on a future evening.

ON DRUGGING FEMALES.

Two cases have lately received considerable attention and a great deal of sympathy in the public papers, which call for comment on the part of medical journals. One occurred in Pennsylvania and one in New Jersey, but the details as related by the victims (?) were strikingly alike. In each an alleged innocent young girl was asked into a saloon to take a glass of soda-water. This she swallowed as natural, and nothing more; but owing to the fluid being "drugged," she immediately lost her senses, passed into a state of complete unconsciousness, and when she recovered, found that her male companion had, as one of the girls curiously expressed it, "got the better of her."

Now, the public, and especially juries, should be taught that any such story as this is rank nonsense. There is no drug known to medicine which

will have any such effect. One might suggest opium: but no form of that hypnotic would act so promptly, and none could be given to the extent required without involving serious if not fatal results. The smell and sharp acrid taste of chloroform or ether could not be disguised by soda-water, and no one would drink a glass containing either of these ingredients. Strong alcohol in some form would perhaps act as stated; but it could not possibly be so concealed in a glass of soda-water that a person, especially one unaccustomed to its use, would not instantly remark its presence; in fact, we do not believe such a person could swallow such a dose as it would be.

These stories, in fact, belong with those which we once before branded in this journal, where women claimed that a man gave them a newspaper to read or waved a handkerchief in their faces, and they immediately became unconscious from the chloroform on the article! They are the tricks of adepts, or the excuses of willing victims. Whenever they are offered as accusations, the public and the juries should know at once that the accuser was *particeps criminis*, and if anything the more guilty of the two.

PROGRESS OF THE GERM THEORY.

We find in our English exchanges the report of an interesting lecture by Mr. Watson Cheyne on those minute organisms which, by many, are averred to be the exciting causes of diseases. The lecturer stated that the great group commonly called bacteria might most conveniently be subdivided into four classes—1. Micro-cocci (round bodies); 2. Bacteria (small oval or rod-shaped bodies); 3. Bacilli (large rod-shaped bodies); and 4. Spirochaetic and spirilla (rods spirally twisted).

After dwelling on the great variety as well as importance of the various parts played by this great group in the economy of nature, Mr. Cheyne observed that great difference existed among the various bacteria in their behavior towards the human body; some could be injected without causing any injury, others could not grow in the living body, but could develop in dead por-

tions of tissue, and the secretions of wounds, giving rise to poisonous products. The true pathogenic organisms were able to attack the living body and multiply in it; they included the organisms which found entrance through some wound giving rise to the traumatic infective diseases, and others which could obtain entrance without observable wound. Further, certain organisms, such as the *b. anthracis*, were capable of growing outside the body in dead organic substance; while others, such as the *b. tuberculosis*, were apparently only capable of developing in the living organism or under artificial conditions which reproduced, to some degree, those existing in the tissues of warm-blooded animals, though capable of long retaining their vitality in the dry state.

With regard to the traumatic infective diseases, he thought that the most absolute proof had been furnished that the bacteria found in them, and nothing else, were the causes of these diseases. To establish such a proposition, it was necessary that an organism of a definite form and with definite characteristics should always be found in the blood or in the affected part. The blood or the affected part, when inoculated into another animal of the same species, produced the same disease. When the blood or the affected part were inoculated on a suitable soil outside the body, the micro-organisms grew, and must be indefinitely propagated on similar soil. When in this manner the organisms had been separated from the remains of the materials in which they were imbedded, their inoculation in an animal must again produce the same disease, the same organisms being found in the diseased parts.

These conditions had now been fulfilled with regard to anthrax, septicæmia of the mouse, erysipelas, tuberculosis, glanders, and acute pneumonia. With regard to typhoid fever, relapsing fever, cholera, and ague, the evidence was very strong, but not conclusive.

There were a number of prominent physicians and microscopists present, who seemed to accept his conclusions. They are interesting, as this theory may be considered the question of the day.

NOTES AND COMMENTS.

A Peculiar Operation for Vesico-Vaginal Fistula.

In the *Medical Times* for April 12, 1884, Dr. T. Pickering Pick reports a case of vesico-vaginal fistula occurring in a woman aged 25, subsequent to an operation for stone. Several operations had been performed for the relief of the fistula, but without avail, as the orifice would not close. A recto-vaginal fistula subsequently formed. She came under his care in May last. The vesico-vaginal fistula was of very large size, freely admitting three fingers; in fact the whole of the posterior wall of the bladder appeared to be gone. The lower wall of the urethra had also been destroyed, so that no remains of the canal persisted. The edges of the fistula were healed. The recto-vaginal fistula was of small size, large enough to admit a goose-quill, situated about two inches from the anus. The tissues around were dense and cicatricial.

In spite of the unpromising nature of the case, he made an attempt to close a part of the vesico-vaginal fistula, hoping, by a series of operations, to gradually succeed in closing the whole of it. In spite of free lateral incisions, however, the amount of tension on the sutures was so great, owing to the scarcity of tissue, that they speedily gave way, and not the slightest benefit was obtained. She was in a most miserable and desponding condition, emaciated, with a wan and anxious expression, and willing to submit to any operation which would rid her of her constant trouble and annoyance.

Accordingly, on October the 18th, the patient having been placed under the influence of ether, and in the lithotomy position, he dissected up a circular belt of mucous membrane from the inner surface of the labia minora, just within the orifice of the vagina. By this means he laid bare a surface, an inch in depth, completely round the vagina. He introduced a curved pewter tube through the recto-vaginal fistula, from the vagina, so that the end protruded out of the anal orifice. The raw surfaces were now brought together with three deep quilled sutures, and five superficial silver wire sutures, so that the orifice of the vagina was completely closed.

After the operation she suffered considerable pain, but otherwise did well. The quilled sutures were cut on the fourth day, and removed on the sixth. On October 30th (the twelfth day after the operation), she was placed under the influence of ether, and the silver sutures were re-

moved. The tube was also withdrawn from the rectum. The whole of the wound was firmly united.

One other point in connection with the case requires consideration, and that is, whether he did right in performing this operation. It seemed to be impossible to close the large opening which existed, and the only other proceeding which suggested itself was inapplicable in this case, and that was to sew the lower margin of the fistula to the posterior wall of the vagina. She would then have menstruated through her bladder, and, of course, would have been incapable of bearing children, but, no doubt, would have been able to fulfil the duties of married life. This plan has been suggested as a remedy, in these cases of extensive destruction of the posterior wall of the bladder, but was not applicable in this case, because there was no urethra, and, therefore, there would have been no power of retaining the urine. Besides, it would not have dealt with the recto-vaginal fistula. Of course, the proceeding condemns the patient to a life of celibacy, and this had to be explained to her before commencing the operation; so great, however, had been her sufferings during seven years of incontinence of urine, that she willingly consented to anything that was suggested which would rid her of her infirmity.

Pepper's Treatment of Chronic Bright's Disease.

Before his class at the University of Pennsylvania, Dr. William Pepper (*Med. Times*, April 19, 1884,) presented a woman suffering from chronic Bright's disease and chronic lung trouble, and made the following remarks on treatment:

"With this pulmonary trouble and emaciation, I should be unwilling to treat her with such a rigid diet as I should resort to if she were in a better state of nutrition, and were not the subject of chronic lung disease. She will receive a light breakfast and supper, consisting of some form of mush, with cream or milk. Her dinner will consist of meat, fish, or oysters. Between each meal she will be given a glass of milk; egg will be avoided. The form of albumen found in eggs has seemed to me to dispose to an increased excretion of albumen. I prefer to this lean, under-done meats and oysters.

"I propose to give her cod-liver oil and bichloride of mercury. Iodide of potassium, which I should gladly give her, occasionally irritates the kidneys. I therefore prefer to use bichloride of mercury, beginning with a moderate dose and increasing it as the stomach will permit. I shall

commence with one-fiftieth of a grain, slowly increasing to one-twentieth of a grain, immediately after meals. The cod-liver oil will be given during the alkaline stage of digestion, an hour and a half after meals. Iodine will be applied over the left chest as frequently as can be done without producing too much irritation of the skin. The action of the skin will be promoted by daily friction and the rubbing of a little oil into the skin."

Congenital Epulis.

The following case, which, if not unique, is certainly very rare, is reported in the *Brit. Med. Jour.*, April 5, 1884, by Dr. Albert A. Gore:

Mrs. M. J. McC., aged thirty, primipara, was admitted into the hospital on March 5, at 7 a. m., and confined at 3.15 p. m. There was a considerable flooding from a placenta partially attached to the fundus uteri, and a rent in the cervix. Having removed the placenta and checked the immediate hemorrhage, I found, on examining the baby, that the mouth was filled by a bluish-red tumor, which projected between the lips, and was firmly adherent to the lower gum immediately to the right of the mesial line. It had a very peculiar appearance, and precluded all attempts at sucking, but not of swallowing, when a little milk and water were introduced on the left side by means of a spoon. On March 8, I passed a double carbolized silk ligature, from within outwards, through the middle of the tumor, tying it tightly at either side. It came away in two days. A second smaller growth, to the right of the first, was treated in a similar manner on March 17. When this last came away, there was a good deal of bleeding from the gum, which was only arrested by the application of a point of solid silver-nitrate. The infant did very well, and the gum is now (March 24) quite healed.

Adulteration of Mustard.

Dr. Cyrus Edson has submitted to the New York Board of Health a report of his inquiry into the adulteration of mustard. The doctor says he found that certain manufacturers were coloring an adulterated mustard with naphthol yellow, a dangerous explosive compound and violent irritant poison. Samples of the mustards, besides being adulterated with naphthol yellow, contained 18 to 60 per cent. of flour and 6 to 20 per cent. of terra alba. He says that "the peculiar danger of this adulteration is the fact that mustard is relied on cases of poisoning as an emetic, and that the

death of the patient may follow in the event of its failure to act."

Yet what was done with the scoundrels who were convicted of making and selling this perilous stuff?

They were let off, with an admonition not to do so any more!

Probably they were big men in their ward, and controlled several dozen votes!

The Insanity of Puberty.

The *N. Y. Med. Jour.*, April 5, 1884, tells us that Ball ("L'Encéphale," Jan., Feb., 1884) expresses his opinion respecting the reason for the occurrence of insanity at the age of puberty as follows: The reflex phenomena, which play so prominent a part in grown men, attain the maximum of their development in the child, as Maudsley has pertinently remarked. The majority of intellectual and moral operations performed during the first years of life are sensory and motor reflexes. Automatism plays an immense part during this period of development; and it is only by degrees that individual action is developed, which is sustained by judgment, experience, and volition. Puberty is therefore the epoch at which the greatest psychological transitions take place, and at which the mind is particularly susceptible to the inroads of mental disease. The unfavorable prognosis is, moreover, attributable to the mental arrest which is liable to arise from insanity occurring at this period.

Active Interference in the Management of Abortion.

A recent number of the *Zeitschrift für Geburtshilfe und Gynäkologie* contains an article by Dr. H. Spöndly, of Zürich, on the above subject. The interference which he recommends is simply that, in every case of abortion, the medical attendant should take care that nothing is left in the uterus, should completely remove placenta and membranes; and that in every case of threatened abortion, where the hemorrhage is profuse, and does not yield to treatment, the uterus should be emptied as soon as possible. The expulsion of the placenta should not be left to nature. In this recommendation there is of course nothing novel, nor has Dr. Spöndly any new instrument, or method of effecting the desired end. The main importance and interest of the paper is in the fact, that the author gives a series of fifty-three cases in which he acted on the principles which he lays down, and with uniformly good results.

SPECIAL REPORT.

OPHTHALMOLOGY.—NO. XVII.

BY C. S. TURNBULL, M. D.,
Oculist to the German Hospital, Philadelphia.

(Concluded from page 574.)

Every one has met with cases of iritis in which atropine does not seem to act promptly and satisfactorily, possibly because an increased tension prevents its entrance, or possibly because of the extreme vascularity of the iris, which I regard as the more probable.

In such cases, instead of making paracentesis or abstracting blood, I instil once a day a few drops of a four-grain solution of eserine. In fact, the habit of distilling eserine once a day in iritic cases has become a routine practice, the patient using the mydriatic in the ordinary manner. Iritis is the only disease in which I employ a mydriatic as the fundamental remedy. In more than one case I have seen adhesions let go under the combined action of the myotic and mydriatic, that had resisted the latter alone. In my judgment, eserine is the remedy *par excellence* in corneal affections. In cases in which mydriasis is necessary, this latter can be produced perfectly, and still the specific effects of the myotic kept up. This is beautifully illustrated in suppurative inflammation after cataract operations, formerly so successfully treated by heat and atropine.

Discussion which followed the reading of this paper:

Dr. McKay said that some years ago he became interested in article written by Dr. Seeley, and published in one of the western journals, in which the use of the yellow oxide of mercury was spoken of very highly. Since that time he had resorted to its use in nearly all cases in which an astringent has been considered desirable in conjunctival troubles, and so far had been very favorably impressed with its effects.

Dr. Gruening said, with reference to the alternate use of mydriatics and myotics for breaking up adhesions, that the method was not quite new. He had seen it resorted to in Paris in 1868. With regard to eserine in iritis, that was something entirely new, and he should regard it as a most dangerous practice. He could produce iritis with eserine at any time in a healthy eye, and also in a diseased eye. His experience had been that iritis was aggravated by eserine. He had used eserine after cataract operations, and had set up iritis. In cases of suppurative keratitis he had ceased to employ eserine completely.

Knapp said, with reference to the use of eserine and atropine, that eserine is apt to produce iritis, and may even be injurious after iridectomy for glaucoma. But there are some forms of iritis, especially the serous variety, where the alternate use of the two remedies is of advantage. Again, in plastic iritis, when there is increase of tension which produces intense pain, the patient sometimes is considerably relieved by the instillation of a drop of eserine.

Seeley said he wished to correct what seems to have been an erroneous impression. It was not the alternate use of eserine of which he wished to speak; not at all. He simply spoke of the use of eserine once a day for the purpose of contracting the blood-vessels, so that the atropine could pass through the corneal tissue more freely. In that way he thought we were able to get up a more free dilatation of the pupil than could be done without the eserine. He had never seen a case in which eserine had produced iritis, and he had used immense quantities of it. He employed it in conjunctival troubles, always in corneal difficulties; once a day cases of iritis which came to the dispensary, of course maintaining mydriasis by the use of atropine.

Knapp had given eserine a faithful trial in corneal inflammation since Thalberg published his observations on keratitis from innunction. He had used it in many cases, and at first thought it controlled this process; but later he had not seen that its beneficial action was in any way constant.

McKay said, that in corneal ulcers it had been his habit recently to use atropine until the inflammation had subsided, and then he used eserine with very good effects, and after such use of eserine he could concur quite fully in what Dr. Seeley had said about that drug.

10. *Treatment of Detachment of the Retina.* By W. F. Mittendorf, M. D., New York, who, during the last three years, has been called upon to treat several cases of very extensive detachment of the retina, occurring in patients that had only one useful eye, the other one being entirely blind or absent.

The good results obtained by the treatment of these eyes, which were practically blind when he saw them first, encourages me to report them today. Although no new remedy or method had been used, it is the combination of the different plans devised for the treatment of this affection, and the mode of administering the remedies, that has led to the success. On account of the uncertainty of the operative measures, these had not been resorted to.

11. *Two Cases of Ectopia Lentis, Congenital Double; one case Non-symmetrical, the other Symmetrical.* By W. S. Little, M. D., Philadelphia.

L. describes two cases of congenital displacement of the lens—a rare ocular deformity, which places the patients in the same condition as those who through accidental or intentional traumatism have no crystalline lenses. One case occurred in the practice of Dr. Little, and the other in that of his friend, Dr. C. S. Turnbull. L.'s case was non-symmetrical, the lenses being displaced upwards and to the left; and in T.'s case both were displaced downward and inward. Superior woodcuts illustrate these typical cases. Convex lenses ("cataract glasses") of 2 to 4" focal distance restored the sight in either case.

12. *"On the Employment of Nitrous Oxide as an Anæsthetic in Ophthalmic Operations."* By George T. Stevens, M. D., New York.

"While the use of nitrous oxide as an anæsthetic is no novelty, its employment has been so largely confined to operations upon the teeth that its merits in other classes of surgical operations have been to some extent overlooked.

"Its more general use in ophthalmic surgery would doubtless be greatly to the advantage of patients and surgeons.

"Laughing-gas, in certain classes of operations, possesses several advantages over all other anæsthetics. It is the least dangerous; its use is not attended with nausea, headache, and other unpleasant symptoms, characteristic of the use of ether or chloroform; and it demands for its administration far less time and trouble than either of these. It is suited for short operations, and in such is quite as effective as either of the more commonly used anæsthetics.

"In brief, my experience has led me to the conviction that nitrous oxide may be employed with advantage in many operations about the eyes. Its use is attended with scarcely any of the inconveniences common to ether and chloroform; it is clean, it does not unfit the patient for immediate examination after operations, it is safe, and instead of requiring a large sacrifice of time on the part of the surgeon, often saves time by enabling him to complete operations more rapidly."

13. *A Contribution to the Operative Treatment of Glaucoma.* By Albert G. Heyl, M. D., Philadelphia, who says: "Not a more brilliant example of the value of the empirical treatment of disease is on record than the history of the application of the iridectomy to the treatment of glaucoma. Originating in what was doubtless the false interpretation of a keen clinical observation, applied

to a disease which even to-day is an unsolved problem, acting in a way which Von Graefe himself could not explain, and which as yet lacks satisfactory explanation, it nevertheless, after twenty years of service, is the main resource in glaucoma. Of course, an operation with such a record must have substantial merit; by this, however, is not meant that the status of the glaucoma iridectomy as a remedial measure is fixed; this can never be until we understand the rationale of its action, and the nature of the disease against which it is used. The practical consequence must be that cases present themselves for treatment where the iridectomy is performed, not because we are persuaded that it is the best possible procedure for the patient, but because we know of nothing better." He describes two distinct conceivable methods of operative treatment which to be appreciated, must be read in full, as carefully detailed as a clinical contribution bearing on the etiology and therapeutics of glaucoma.

14. *Some Additional Remarks on the Theory of the Astigmatic Pencil.* By G. Hay, M. D., Boston.

15. *Four Cases of Sarcoma of the Uveal Tract.*

K. reports four successful cases of enucleation for sarcoma of the uveal tract, all of which go to show the importance of a careful diagnosis and speedy removal of the affected globe. Of the last case he goes on to say, the tumor started from the outer layer of the choroid, as the chorio capillaris was tolerably well preserved in many parts of the surface of the tumor. Although in contact with the sclerotic over a large space, no sarcomatous cells were found in this membrane.

In a paper on the "Diagnosis of Intra-Ocular Sarcomata," Becker says: "Choroidal sarcomata originating in the region of the macula seem from the very beginning to have but little disposition to proliferate in the interior of the eye, but are prone to develop posteriorly in the orbit." That this does not always occur is proved by the above case.

16. *"Case of Ossification of the Choroid."* By Charles J. Kipp, M. D., Newark, N. J.

The eye was removed from a young man, 22 years of age, who was first seen ten years before the eye was enucleated. At that time the eye was free from all signs of irritation. There was an adherent chalky cataract, which, according to statements of the child's parents, was first noticed by them shortly after birth. The iris was atropic. The eye diverged, and had but imperfect perception of light. As the case was hopeless so far as the restoration of sight was concerned, no treatment was advised.

Ten years later the patient was seen again. He was now suffering great pain in the eye. There was much circum-corneal injection. The cornea was clear, the anterior chamber of normal dimensions, and the aqueous clear. The iris was much bulged forward in its central portion, while the pupillary margin was completely fastened to the anterior capsule, and the periphery of the iris was retracted. The pupil was very small, and of the form of a crater. The cataract was as before. The anterior upper ciliary region felt soft to the touch, while at every other part the sclerotic was very hard. The eye was enucleated in the usual way, and the wound healed kindly and quickly.

Examination of the eye showed a very thick deposit of a hard substance (bone) over the whole inner surface of the choroid, reaching to the ciliary body. The bony capsule was perforated at the optic nerve entrance. The retina was detached in the form of a cord. The choroid was thickened. A thick diaphragm extended across the eye, and was adherent to the ciliary body. The lens was in front of and closely connected with this diaphragm. The lens was of bony hardness in parts, but no bony structure could be discovered here. The bony capsule showed the ordinary characteristics of bone. The specimen was presented on account of the very extensive formation of bone, which is certainly not very common; and also because of the youth of the patient from whom the eye was taken. It is doubtful whether there is another case on record in which the formation of bone in the eye occurred so early in life.

17. "*Two Cases in which 'Trituration of the Cortex' was Practiced in Connection with Preliminary Iridectomy to Hasten the Development of Slowly-ripening Cataracts.*" By Samuel Theobald, M. D., Baltimore. "Acting upon the suggestion put forth by Professor Förster, of Breslau, in a paper which appeared in a late number of the *Archives of Ophthalmology*,* I have attempted recently in two cases to hasten the development of cataracts, which were very slowly maturing, by having recourse to the procedure which he has called trituration of the cortex—a kneading or bruising of the anterior cortical layers of the lens by pressure upon the cornea, after iridectomy, and while the anterior chamber is still empty. In the first case the excision of the iris was followed by hemorrhage into the anterior chamber, and this obscured the pupil to such a degree that trituration, which was done

with the angle of a strabismus hook, as recommended by Professor Förster, was very imperfectly performed. In the second, in which the kneading was done with the smooth end of a Bowman's tortoise-shell cataract spoon, that seemed better adapted to the purpose, there was no hemorrhage, and the operation was satisfactorily completed. In the first, the operation was followed by but slight change in the condition of the lens; in the second, however, a very rapid development of the cataract ensued. In each there occurred a sufficient amount of iritis to cause slight but persistent adhesions to form between the iris and lens at the pupillary angles of the coloboma; and in the second case it was found, upon examination by oblique illumination a day or two after the operation, that near the cut edges of the iris the pigment layer had become detached from the muscular coat in a manner which was quite peculiar. That the iris should be more or less bruised, as well as the lens, however carefully the trituration be performed, appears inevitable, and the risk of exciting inflammation in this way seems the chief objection to the procedure. It would appear, however, that Professor Förster has not had serious trouble from this source, as he makes no reference to it in his paper."

Discussions accompanied this paper, and Dr. Gruening said he had performed Förster's operation twice during the last year, and had already given the result of the operation at the April meeting of the New York Ophthalmological Society. The first case was that of a lady upon whom he had operated for cataract in one eye; she had an immature cataract in the other eye, and inquired whether or not something might be done to hasten the ripening of the cataract. Dr. Gruening performed a large iridectomy upward, and with the angle of strabismus hook also trituated the lens, but only in the area of the pupil. The result was that no iritis occurred, and the lens became completely opaque within one week. He extracted the lens three weeks subsequently with a very good result.

The second case was that of an old gentleman, highly myopic in both eyes, with double cataract. The condition of the gentleman for four or five years was very sad; he was gradually losing the power of reading, and he was anxious to retain his position, which entirely depended upon his vision. Dr. Gruening proposed this operation to him, and in March of this year he came to New York, where he performed iridectomy upward, and again trituated the lens, as in the former case, only in the area of the pupil, and in four days

*On the Maturity of Cataract: Its Artificial Ripening, Corelyses, and Extraction of the Anterior Capsule. Vol. x., No. 3, September, 1882

the lens was completely opaque. He has not yet performed cataract operation. But if the patient continued to do well, he should in September remove the cataract. There are certainly cases in which the operation is indicated, and it is attended with great gain." This delicate operation is not to be recommended, as discretion is the better treatment part of valor.

18. "*Vaseline-cerate—A Convenient Basis for Ointments Intended for Application to the Eyelids.*" By Samuel Theobald, M. D., Baltimore.

19. "*A Case of Blindness from Retinal Thrombosis in consequence of Facial Erysipelas.*" By H. Knapp, M. D., New York.

"Only a limited number of cases of blindness in consequence of facial erysipelas is on record. Their symptoms vary considerably. There is a lack of ophthalmoscopic examinations during the first stage of the affection. Not long ago I had the rare opportunity of observing such a case almost from the beginning to the end. The results appearing very remarkable in many respects, I feel justified in bringing them to the notice of the society, so much the more so as I can lay before you a number of ophthalmoscopic drawings representing the different stages of the disease.* The case is as follows:

"Reserving a detailed discussion of this case for a publication in the Archives of Ophthalmology, I restrict myself here to the following remarks:

"1. The blindness was produced by compression of the central retinal veins, both having been directly observed with the ophthalmoscope one day after the occurrence of the rapid, almost sudden loss of sight.

"2. The ophthalmoscopic appearances, observed from beginning to the end, showed no neuroretinitis, but the successive stages of thrombosis.

"The decrease of the swelling of the orbital tissue, or the establishment of collateral circulation from the choroid, permitted the return of a limited flow of blood into the retinal arteries, which, however, being impeded by the blocked veins, led to renewed extravasations, to thrombosis, and shrinkage of the arteries, and finally to atrophy of the optic nerve.

"4. Perivascularitis played no, or only an unimportant part in the pathology of this case.

"5. The white segments in the veins and arteries were white thrombi, not hypertrophy of the walls of the blood-vessels.

"6. The thrombosis was present, in all proba-

bility, also in the orbital veins, but did not, as in other cases, extend to the cerebral sinuses."

20. *Changes in Refraction Resulting from a Blow.* By W. H. Carmalt, M. D., New Haven, Conn., who suggests some interesting queries concerning this peculiar form of traumatism.

21. *A Case of Blepharoplasty according to the British Method.* By E. Gruening, M. D., New York.

He then describes at length a most successful operation for entropion caused by a burn, having transplanted his flap without a pedicle from the left arm of the patient.

Case Illustrating the Difficulty in Recognizing Glaucoma. By Lucien Howe, M. D., Buffalo, New York.

The fact to which he would call attention, he says, is the occasional difficulty of a differential diagnosis of glioma. This is illustrated by the brief outline of a case which is honestly described and is far more instructive than a narration of most successes. He concludes by saying, this is not the first time that a similar error in diagnosis has been reported to this Society. In the "Transactions of 1870," Dr. Allin reports the case of a child from whom he removed both eyes for supposed glioma, and although that diagnosis was confirmed by several colleagues of wide experience, the further examination of the enucleated globes proved that glioma did not exist. The same subject was brought up at the meeting of the Ophthalmological Society of Great Britain and Ireland last October, when Mr. Nettleship presented a paper "On Certain Cases of Destructive Ophthalmitis in Children." In this he pointed out the great difficulty of a differential diagnosis between the results of such inflammations and glioma.

It is to illustrate this difficulty that the present case is reported, realizing that quite as much is learned by failure as by success. Moreover, in view of the constant possibility of error, and also in view of large mortality from glioma in spite of operation; it is questionable whether we are justified in such hasty recourse to enucleation as most writers are accustomed to recommend.

23. *Commotio Retinae: or Some of the Effects of Direct and Indirect Blows to the Eye.* By E. Eugene Holt, M. D., Portland, Me.

Prof. F. Von Arlt, in his work, "Injuries of the Eye, and their Medico-legal Aspect," (translated by Dr. C. S. Turnbull, Philadelphia,) under the head of "Participation of the Retina in Contusion or Concussion of the Bulb," discusses the subject very fully.

*The drawings, executed in chromo-lithography, will appear in the first number of the Thirteenth Volume of the Archives of Ophthalmology.

Dr. Holt does not include it among the bibliography of the subject, but it is referred to in a footnote. The association of pupillary symptoms in these cases leads to the consideration of whether they are due to want of reflex to light or iridoplegic; or if the retina is affected secondarily to the cause that produces the anomalies of the iris; the ciliary muscle and the choroid being affected as well and thus affecting the nutrition of the retina, the pupil being primarily affected by the traumatism, and less sensitive secondarily to influence of light on the retina. A case recently observed, hit with a piece of coal some weeks prior to the patient being seen, had no pupillary symptoms then; but a large white patch down and out from optic nerve; this, under treatment, gradually subsided; a scotoma existed, and gradually became less as the opacity diminished. The pigmented condition at points showed the choroid had been involved, and yet no apparent rupture recognizable. Until the evidence of commotio of the brain and spinal cord is obtained, no solution of continuity existing; the subject of commotio retina, while interesting, is not proved. Arlt agrees with this statement.

24. "*Two Cases of Ophthalmoplegia Externa Associated with Disease of the Optic Nerves, from Brain Tumor, with an Account of the Post-mortem Examination.*" By Chas. Stedman Bull, M. D., New York.

These cases are of peculiar interest not only to the ophthalmologist, but also to the neurologist, as they are carefully worked up.

CORRESPONDENCE.

Thomsonianism—Lobelia.

EDS. MED. AND SURG. REPORTER:

In the 5th of April No. of the REPORTER you refer to Thomsonian practice in the use of lobelia, and intimate that you would accept further statements. I do not think that very much is definitely known about this powerful drug. I have a few indefinite statements I will make, if for no other purpose than to relieve the tediousness of continual sober facts.

Thirty-one years ago just now, I bought out a physician, and entered into practice in a town on the Penobscot Bay, and, as luck would have it, I found Thomsonianism rife in many of the best families all about me. No one claimed to be an educated physician, and even some old women were respected as the administrators of lobelia, "hot crop," cayenne, byberry, etc. There was one physician in an adjoining town, who had a large practice and was highly esteemed by those of that way of thinking, and his visits to my neighborhood were frequent and profitable.

It seemed to be a general idea with this people

that lobelia was quite a harmless agent. It was given in large doses, and, when designed as an emetic, it was preceded and accompanied with soda and hot teas. I often heard of cases of complete prostration and relaxation following its use. This did not seem to frighten them, but, on the contrary, was regarded as a proof of its specific effect, as it was "working through the system." Hence they, in many cases, sought to carry the dosing till the patient "could not lift a finger from the bed." Patients rather boasted that they had themselves taken it to this extent. I was acquainted with a highly nervous young woman who had often been so relieved, but as she has so long remained an invalid, though of excellent constitutional stock, there is reason to believe that this drugging was a harm to her.

It is certain that this mode of practice was damaging to typhoid fever, though the believers in it were blind enough to brag on its success in such cases. Sure it is, that the fever cases under this ablest physician were much more aggravated and fatal than such cases which fell to my lot, or that of regular physicians in general. I was called to one young man just before he died, the mucous membrane of whose mouth looked puffy, as though it had been parboiled. When his friends expressed a wish to send for me, the physician desired delay till he could try one other medicine, which he did, for he said he had one which he had given and known to have been given several times "after persons had breathed their last, and it had brought them to." I saw a child with croupy symptoms, but the next day he was out and the father told me that I need not call again, but if necessary he would send for me. A day or two later, the child being worse, another physician was called, who gave an emetic dose of lobelia, which did not operate, and I was hastily sent for, and arrived in season to see the child die, but not of dyspnoea. I think the child died from the direct prostrating effects of the dose. Indeed, I have reason to believe that many patients were so killed, while the cause of their death was ignorantly attributed to something else. However, the practice of using so much hot stuff acted the part of stimulants, and doubtless did something to avert the tendency to fatal prostration, which otherwise must have been common. Soda, when used, in a measure neutralizes its active principles.

While it is possible some cases may have been saved by this heroic dosing, which milder measures would not have reached, I am positive that many lives were sacrificed by it which a more rational course would have cured.

At one time the physician referred to came into my neighborhood to attend a young woman in confinement. It proved to be a breech presentation, and I was summoned to his assistance, and delivered the lady in good shape, and left her in his care. He gave her nothing to quiet nervousness and procure sleep, though he remained in the house the rest of the night. The patient after a couple of hours complained of some pain. He was called up to see her, and gave her a dose of tincture of lobelia, which set up vomiting, which in turn was followed by convulsions, from which she never recovered. Taking the patient of very ner-

vous temperament, who had had a tedious labor with first child, and who was exhausted for want of food and sleep, the remedy he gave was certainly inopportune, and we can hardly wonder at the result. That she was killed when a different plan would have saved her, is quite certain.

On some constitutions in particular it acts like tobacco, inducing sudden and extreme prostration, while our means to combat this untoward depression are none the best. I have myself suffered great depression from small portions of both these agents. A dose of the latter given me by injection for colic more than twenty-five years ago, so injured my nervous system that I have never recovered from it. Of both these agents, in any considerable doses, I am afraid. Yet I use lobelia in several diseases, particularly in asthma and coughs. Indeed, I know an eminent physician who assured me that he does not consider a cough mixture complete without lobelia. I use it in connection with sanguinaria in the catarrhal croup of children, in which cases it works admirably; and yet I do not know but the benefit of the medicine is due to the sanguinaria, as I have lately seen it highly extolled in such cases.

A frequent practice among the Thomsonians was to get the patient steaming hot with abundant hot teas, hot stones or bottles of hot water in bed, or over burning alcohol in a chair, and then suddenly dash cold water or vinegar over the patient. A stout burly sheriff of my acquaintance was thus got hot over alcohol, when the pretended doctor sent down to the cellar and got a pint of almost ice-cold vinegar, and pulling away the clothes from the patient's bosom, dashed the vinegar in. This instantly gave a spasm to the fist, which "striking out from the shoulder," piled the doctor and his empty vinegar-dish into the corner together, when he was told to "get up, and get out of this as soon as possible."

There is no doubt that lobelia contains valuable properties for some diseases in some constitutions; but as it is, as I believe, a treacherous medicine, without reliable antidotes to its ill effects when they occur, as they often will when it is used in large doses, and as we have so many other better known and more reliable medicines for nearly all the purposes to be accomplished by this, the real sphere of its usefulness narrows down to a few diseases in which only small doses of the remedy are required. This, I believe, is where lobelia must stand in the light of to-day.

Boston, Mass.

E. CHENEY, M. D.

NEWS AND MISCELLANY.

Medical and Chirurgical Faculty of Maryland.

At the eighty-sixth annual meeting held in Baltimore, April 22, 23, 24, and 25, the following papers were read:

"Report on Surgery," by Dr. J. Edwin Michael.
 "The Efficacy of Iodoform in Preventing Uterine Colic and Pelvic Inflammation following the Intra-uterine Application of Nitrate of Silver," by Dr. W. A. B. Sellman.

"Report in Section of Practice," by Dr. A. B. Arnold.

"Some Practical Views on Dietetics in Disease,

or the Relation of Dietetic Errors to Disease," by Dr. William Pepper.

"The use of Ergot in Obstetrics," by Dr. P. C. Williams.

"Report on Materia Medica and Chemistry," by Dr. A. Atkinson.

"The Sanitary Needs of the Poor," by Dr. C. W. Chancellor.

"Some Sanitary Statistics of Baltimore in the Past," by Dr. John Morris.

"Four Cases of Abscess of the Brain," by Dr. J. W. Chambers.

"The Progress of Bacterial Pathology," by Dr. Joseph T. Smith.

"Preventable Blindness," by Dr. Samuel Theobald.

"Removal of Fragments of Iron from the Eye by the Magnet," by Dr. Chisholm.

"Photo-micrography," by Dr. A. G. Hoen.

"The Influence of Lung Retractivity in Pleurisy and Pneumothorax," by Dr. F. Donaldson.

"Brain Localization," by Professor G. Stanley Hall.

"Suicide, with Presentation of Mechanical Means of Restraint," by Dr. J. S. Conrad.

"The Maximum Volume of Blood sent out by the Left Ventricle in a Single Beat, and the Influence of Variations in Venous Pressure, Arterial Pressure, and Pulse-rate upon the Work Done by the Heart," by Drs. W. Howell, and F. Donaldson.

"The Result of Operative Measures for Rectal Cancer—Report of Cases," by Dr. L. McLane Tiffany.

"The Common Sassafras a Potent Drug and a Dangerous Narcotic," by Dr. Charles G. Hill.

"Cases of Reflex Cough, due to Nasal Polypi, with Remarks," by Dr. John N. Mackenzie.

"Some Remarks on a Recent Epidemic of Typhus at Bay View Hospital," by Dr. George B. Reynolds.

"Congenital Anomaly of the Fœtal Heart, consisting of the Absence of one of the Segments of the Mitral Valve in which a Systolic Murmur was Heard Before Birth," by Dr. Eugene F. Cordell.

"On Certain Practical Points in the Pathology, Clinical History, and Treatment of Cancer," by Dr. George H. Rohé.

"Results from the Investigation and Study of Cow-Pox," by Dr. St. George W. Teackle.

The following officers were elected for the ensuing year: Dr. Thomas S. Latimer, President; Drs. John R. Quinan and J. E. Atkinson, Vice-Presidents; Dr. G. Lane Taneyhill, Recording Secretary; Dr. Robert E. Wilson, Assistant Secretary; T. B. Brune, Corresponding Secretary; Dr. W. F. A. Kemp, Treasurer; Dr. Richard Thomas, Reporting Secretary; Drs. Williams, Michael, Stewart, Tiffany, and Lynch, Executive Committee.

Texas State Medical Association.

The sixteenth annual session of this Association was held at Belton, April 22, 23, 24, and 25, when the following papers were read:

"Evolution," by Dr. R. W. Park.

"An Historical Resumé of Medicine," by Dr. A. P. Brown.

"Bimuriate of Quinia with Urea Used Hypodermically," by Dr. R. P. Falley.

"Continued Fever," by Dr. S. H. Stout.

"Mineral Waters of Texas, notably Wootton Wells, Lampasas, and Palo Pinto Springs, Sulphur and Luling Springs, and Sour Wells," by Dr. J. M. Willis.

"Intestinal Parasites in Texas," by Dr. C. M. Ramsdell.

"Hot Water in Heart Failure from Hydrate of Chloral," by Dr. C. R. Johnson.

"Alcohol as a Poison," by Dr. J. C. Milner.

"Animal Ligatures from the Texas Mule-eared Rabbit," by Dr. H. W. Dudley.

"Mulberry Calculus from a Female Child, Aged Four Years," by Dr. J. D. Osborn.

"Mulberry Calculus," by Dr. T. H. Nolt.

"Mulberry Calculus," by Dr. W. H. Brown.

"A Case of Periosteum Grafting," by Dr. C. W. Trueheart.

"Antagonism Between Syphilis and Carcinoma," by Dr. Edward Goldman.

"Near-sightedness Caused by a Carious Molar," by Dr. G. P. Hall.

The following papers were read by title:

"Fibro-Cystic Tumor," "Typho-malarial Fever," "Blood-letting Traits," "Operation Cyclone," "Surgery of the Lying-in Chamber," "Prolonged Vomiting," "Magnesia Sulphas as a Cholagogue." Referred to the Committee on Publication: Dr. W. J. Burt, chairman; Dr. J. E. Daniels, and Dr. J. S. Broils.

The following officers were elected for the ensuing year:

President.—Dr. H. C. Ghent, of Belton.

Vice-Presidents.—Dr. E. P. Becton, of Sulphur Springs; Dr. H. H. Darr, of Caldwell, and Dr. M. Martin Hearne.

Secretary.—Dr. W. J. Burt, of Austin.

Treasurer.—Dr. J. Larendon, of Houston.

The next meeting will be held at Houston, Texas, in April, 1885.

American Medical Association.

The American Medical Association convened in annual session in Washington, May 6th, over 500 members being present. An address of welcome to the members of the Association was delivered by Dr. Garnett, after which a report of the executive committee was read, setting forth the arrangements made for the reception and entertainment of the delegates. Dr. Austin Flint, president of the association, then delivered his annual address, in which, after reviewing the history of the association, he dwelt particularly upon the advance which was constantly being made in medical knowledge. He suggested that a committee on education be appointed to confer with the faculties of schools and colleges in order to secure uniformity in the standard of requirements for matriculation and graduation; also that the title of M. D. be made simply honorary, and that it should not entitle a person to practice. Dr. Flint further recommended that a resolution be adopted specifying with more precision the grounds for refusing co-operation with irregular practitioners. He thought that the assuming of some sectarian name ought to place the practitioner out of the pale of the medical code, and this sentiment was applauded by the listeners. In concluding, the president paid a tribute to the

service of the late Dr. S. D. Gross, of Philadelphia, an ex-president of the association.

After announcement of the meetings of the various State delegations, the association adjourned until the next day.

In the evening, the members of the association, with their wives and other ladies of their families, were given an official reception at the White House.

A full report of the meeting will be given in our next issue.

Arkansas State Medical Society.

The ninth annual session of this Society was held at Little Rock, April 30, May 1 and 2. The following papers were read:

"Concussion of the Spine," by Dr. E. Bentley, U. S. A.

"The Germ Theory in Syphilis," by Dr. W. P. Hart.

"Some Ideas on Antiseptics and Antisepsis," by Dr. R. B. Christian.

"Procidencia Uteri, Attended with Rupture," by Dr. D. C. Ewing.

"The Germ Theory of Malaria," by Dr. W. P. Hart.

"Use of Opium in Congestive Forms of Fever," by Dr. J. J. McAlmont.

"The Management of Dyspepsia," by Dr. T. E. Murrell.

"Congenital Extrophy of Bladder," by Dr. G. W. Hudson.

"Gun-shot Wound of Bladder," by Dr. W. F. Blackburn.

"Laceration of Cervix, Complicating Epithelioma of Same," by Dr. J. T. Jelks.

University of Pennsylvania.

At the annual commencement of the Medical and Dental Departments of the University of Pennsylvania, held in the Academy of Music on Thursday, May 1, 1884, the degree of Doctor of Medicine was conferred upon 103 graduates, and that in Dentistry upon 32.

The degree of LL. D. was conferred upon Professor S. D. Gross, and a portrait of Professor Stillé was presented by Dr. Wm. A. Bachelor, on the part of the graduating class, and was received by Dr. S. Weir Mitchell, Chairman of the Medical Committee of the Board of Trustees. The valedictory address was then delivered by Theodore G. Wormley, M. D., LL. D.

The prizes conferred were as follows: The Henry C. Lea prize of \$100 to George A. Bodamer; a \$50 prize to Edgar H. Steer, for first honor; the Alumni prize of \$50 to Wilmer H. Batt; the Faculty prize of \$50 to Hobart Amory Hare; "Agnew's Surgery," to Edgar Steer; microscope to Albert E. Norton.

An Anti-Vivisection Defeat.

The French Court of Cassation has quashed a judgment obtained some time ago by the proprietress of an hotel near the Sorbonne, awarding damages for disturbance to her trade caused by the howlings of dogs undergoing vivisection at that institution. The Court holds that the physiological experiments in question constitute a

branch of instruction given by the State, and that M. Paul Bert, against whom the judgment was obtained, and other professors of every rank, accomplish by such experiments a public service.

Georgia State Medical Society.

At the thirty-fifth annual session of this society held in Macon, April 16, 17, and 18, the following officers were elected for the ensuing year:

President—Eugene Foster, M. D., of Augusta.

Vice-Presidents—Drs. J. B. Roberts, of Sandersville; and W. D. Bozzell, of Atlanta.

Secretary—Dr. James A. Gray, of Atlanta.

Treasurer—Dr. E. C. Goodrich, of Augusta.

The next meeting will be held in Savannah, on the third Wednesday in April, 1885.

The Power of Health Boards.

A recent suit in a New Jersey court brought up the question whether the Health Board of the city of Paterson had a right to control the thickness of the walls of new buildings, under a charter which gave the power to "regulate dwelling houses." The Court held that this statute only gave the power to regulate houses in order that they might be free from disease. The word "health" was broad enough, it was said, to embrace the idea of safety as well as freedom from disease, but this was not the general meaning of the word, and was not the intent of the Legislature. The powers of the Health Board must, therefore, be confined to sanitary matters.

The University of Moscow.

In this University during 1883 there were altogether 2,799 students, 1,316 of these being medical. The number of professors amounted to 81, 32 of them belonging to the medical faculty. There were also eight *privat doctentes*, almost all of whom belonged to the medical faculty.

Items.

—An apparatus for lighting doctors' gigs or broughams by electricity has been successfully used in England. The Swan light is used, and a portable battery.

—According to recent decisions by the Treasury Department, the duty on effervescent citrate of magnesium is fixed at 25 per cent., and that on carbon battery plates at 20 per cent., ad valorem.

—The Egyptian Government has abrogated the decree instituting a Council of Health, and has established a directorship of sanitary services attached to the Ministry of the Interior, in whose hands such services shall be centralized.

—Dr. Giovanni Paccinini ligated the subclavian artery on a boy, fourteen years of age, on January 5th, in Rome. The operation was done on account of a wound of the left axilla, which involved the artery and vein. The boy was in a satisfactory condition fifteen days afterward.

—The *Gazette Hebdomadaire de Médecine et de Chirurgie* quotes a Rio de Janeiro newspaper to the effect that Dr. Domingos Freire's supposed discovery of the contagium vivum of yellow fever, and of the practicability of preventing the disease by inoculation, are attested thus far by 211 successful inoculations.

—"Coffee essence," an article used for making coffee in some of the cheap coffee-houses of New York city, has been analyzed by order of Dr. Cyrus Edson, of the Sanitary Bureau, and it is said that many specimens have been found to have been grossly adulterated, with dried blood for example, and that the manufacturers will be prosecuted.

—To a recent meeting of the Sheffield Medico-Chirurgical Society, Mr. G. K. Thorpe introduced a patient with an indurated sore at the outer side of the left eyebrow. The chancre had nearly healed. There were secondary symptoms. At the same meeting Dr. Cleaver showed upwards of one hundred lumbricoid worms, which had been passed by a child three years of age within seven days, by the help of *santonin* and *calomel*.

—Dr. E. M. Moore, jr., has elaborated a plan for the proposed Children's Hospital of Rochester, to be built on the shore of Lake Ontario. The edifice, if constructed, will accommodate about thirty patients, and will be used during the summer months for infants who are stricken with cholera infantum and other summer maladies for the relief of which pure air is necessary. The hospital will cost about \$10,000.

—At a recent meeting of the Berlin Medical Society, Professor Virchow showed photographs of a gigantic palm-tree in the island of Cos, under the shade of which Hippocrates is said, by tradition, to have held medical consultations. The tree now stands in the market-place of the town of Cos, on the east side of the island. The branches, which spread over nearly the whole of the market-place, are supported by marble pillars.

OBITUARY NOTICES.

SAMUEL D. GROSS, M. D., LL. D., D. C. L., OXON., LL. D. CANTAB.

Our readers will be pained to learn that this distinguished surgeon has departed from among us, his death having occurred at twenty minutes before one o'clock on Tuesday, May 6.

Samuel D. Gross was a native of this state. His birthplace was near Easton, and the date of his birth July 8, 1805. He was educated at the classical academy, Wilkesbarre, and at the high school, Lawrenceville, N. J. He began his medical studies at an early age under the preceptorship of Dr. J. K. Swift, of Easton, and continued them for nearly two years under the private tuition of the celebrated Professor George McClellan, M. D., of this city. Dr. McClellan, with a number of prominent citizens, was greatly interested in the foundation of Jefferson Medical College, and the future professor whose eloquence was so often to echo from its walls in after years, graduated from that institution in 1828, and at once entered upon practice in this city. The leisure time which every young physician has his full share of, young Dr. Gross employed in translating several standard French and German medical works. But his ability removed him far above the province of the mere translator, and only two years after his graduation he brought out his first original work, a treatise on "Diseases and Injuries of the Bones and Joints." During the year that marked his appearance as an author he removed to Easton, but his residence there was terminated

in 1833 by his election as demonstrator of anatomy in the Medical College of Ohio. Two years later he was chosen professor of pathological anatomy in the Medical Department of the College at Cincinnati, where he delivered the first systematic course of lectures ever given on morbid anatomy in the United States, writing, in the meantime, his second original work, "The Elements of Pathological Anatomy." This, also, was the first production of the kind published in this country.

Prof. Gross' next invitation to a post of important trust and responsibility came from the University of Louisville, where his services were called for in the chair of surgery. For ten years he labored in that institution, stamping upon it indelibly the impress of his professional genius, and left it only to accept the same chair in the University of New York, where he was the successor of the celebrated Dr. Mott. Louisville, however, was determined not to give him up. His former colleagues in that city were eager for his return, and at the end of the first session he went back to the Louisville University and remained there till 1856, when his alma mater summoned him to return as a teacher to the halls whence he had gone forth as a distinguished student. Dr. Gross finally obeyed the summons, and his brilliant record culminated in the labors of the succeeding period of twenty-six years. Shortly after settling in this city, he founded the Philadelphia Pathological Society, of which he was the first president. In 1867 he was elected president of the American Medical Association. Four years later he was chosen chairman of the Teachers' Medical Convention at Washington. In June of the same year he was elected president of the Pennsylvania State Medical Society, and in 1872 he went to Europe; whither he had already made one trip for rest and health. On the occasion of his second visit he went, not as a rising, but still unknown physician, with only a local reputation, but as a master in his science, a surgeon of brilliant success, and an author whose reputation was as wide as civilization. The University of Oxford, while Dr. Gross was in England, held its one thousandth commemoration, and as a feature of that occasion, gracefully complimented the American Faculty of Medicine in conferring upon its distinguished representative the honorary degree of D. C. L. The University of Cambridge in 1880 followed the example of its sister institution by conferring upon Dr. Gross the degree of LL. D., which he had previously received from Jefferson College, and at the recent Tercentennial of the University of Edinburgh, he was granted the honorary degree of LL. D. Honors now came thick and fast, and not the least among them was Dr. Gross' election, in September of 1876, to the presidency of the International Medical Congress, which met in this city. Four years afterwards the eminent surgeon founded the American Surgical Association, which met on the 29th of April at Washington, and of which he was president. In 1882, Dr. Gross organized the American Academy of Surgery; but in the same year, signaled by his bringing out a new edition of his celebrated work on Surgery, which has been translated into several languages, he resigned his professorship at Jefferson College, to the great regret not only of all connected with the institution, but of the gen-

eral public, though he still continued the active practice of his profession.

The work just referred to is the system of surgery which has passed through five editions, and upon which his posthumous fame will probably depend. The work appeared in 1859, and the last edition was brought out in 1882. In 1863 it was translated into Dutch, and has since, as already stated, been translated, as a text-book, into the languages of most of the leading colleges of Europe. Among other works which he wrote or edited are the "American Medical Biography," "A History of the Progress of American Surgery," and "A History of American Medical Literature." Dr. Gross was one of the founders and early presidents of the Kentucky State Medical Society, and has been elected an active or honorary member of the Royal and National Medical Societies of England, Scotland, Austria, Norway, and other European States.

Professor Gross, at the dinner given to him in this city on April 10, 1879, said: "After fifty years of earnest work I find myself still in the harness; but although I have reached that age when most men, tired of the cares of life, seek repose in retirement and abandon themselves to the study of religion, the claims of friendship, or the contemplation of philosophy, my conviction has always been that it is far better for a man to wear out than to rust out. Brain work, study, and persistent application, has been a great comfort to me, as well as a great help; it has enhanced the enjoyment of daily life and added largely to the pleasures of the lecture-room and of authorship; indeed, it will always, I am sure, if wisely regulated, be conducive both to health and longevity. A man who abandons himself to a life of inactivity, after having always been accustomed to work, is practically dead."

CHARLES T. HUNTER, M. D.

Dr. Charles T. Hunter, late Demonstrator of Anatomy in the University of Pennsylvania, died April 28, 1884, aged forty-one years, after a protracted illness of nearly three years. He suffered from blood-poisoning, induced by a dissecting wound. Dr. Hunter was born in North Bloomfield, Trumbull county, Ohio, January 13, 1843. Receiving his preliminary education in New England, he entered the Medical Department of the University of Pennsylvania, graduating in 1868. Upon receiving his degree, he established himself in practice in Philadelphia, having been for some years assistant to the chair of Surgery in the University. He was a member of the College of Physicians, Pathological Society, and the Academy of Natural Sciences, and had been surgeon to the out-patient department of the Pennsylvania Hospital.

He was a most conscientious and diligent laborer in the medical vineyard, and his death is a great loss to the profession, though to him it is a blessing, as he had been a great sufferer during these three long and weary years.

MARRIAGE.

FAGER—MARSHALL.—In Harrisburg, Pa., January 31, 1884, by the Rev. J. A. Melick, C. M. Fager, M. D., and Miss B. B. Marshall, daughter of Dr. R. C. Marshall, West Fairview, Pa.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

CATARRHAL JAUNDICE.

BY HUGO ENGEL, M. D.,
Of Philadelphia.

The catarrhal inflammation of the mucous membrane of the biliary ducts is a disease comparatively common in our city. While I have heard of cases that were said to have happened at any time of the year, I have myself never seen a case originate, but in the fall; especially, however, during the later and colder half of autumn. Many cases seem to point to exposure to cold and damp as the pathogenic cause of catarrhal jaundice, and I must confess that on looking over the record of my cases, in most of them such an etiology was apparently proved with great clearness. Still, if we admit that acute lobar pneumonia is an infectious, febrile malady, a zymotic disease with a special tendency to the lungs, and if we remember that in a great many cases of croupous inflammation of the lungs, jaundice, at times combined with vomiting, occasionally ushers in and not seldom accompanies the graver disease, we cannot avoid finding many points of similarity. Besides, analogy makes this view still more plausible. We need but think of typhoid fever to acknowledge the truth of my assertion. There the microzymes may be either swallowed with the food or drink, and may thus arrive in the small intestines, or may be inhaled, when they travel along the respiratory passages, until they have established their dangerous residence in the lungs. In one Prager-epidemic, reported by Koch or by Ziemssen, by far the greatest majority of cases of

typhoid fever evinced almost none of the symptoms usually considered characteristic—diarrhœa and similar evidences of an intestinal lesion—but the whole disease seemed to consist of the lung complication, generally met with only in the later stages, and then looked upon as an accidental occurrence, induced by the position of the patient, and called hypostatic congestion, although recent investigations appear to indicate that the time will not be far when hypostatic congestion, as now known, will be erased from the list of diseases, and be only then admitted to exist as such, when *in articulo mortis* an actual stagnation of the circulation, in parts most dependent, is really apt to occur.

But no matter what the pathogenic cause: exposure to cold and damp in an individual, otherwise already not in the best condition of health, evidently is an exciting and more than predisposing element. Glancing at the list of patients who come under my observation, either in clinic, hospital, private, or consultation practice, I find the following: People suffering from the disease either had been working hard, their nutrition not been the very best, their hygienic surroundings leaving much to be desired, or they had been leading a life of dissipation, or had been the victims of mental overwork, or of cares and worry, or had a constitution debilitated by other agencies. But, whatever had brought their health below par, I have not met with a single individual affected with catarrhal jaundice, in whom, beside the direct, exciting cause, there had not existed a predisposition, induced by a lowered standard of health. Even if the patients would not admit such a state, a careful inquiry into

their history left no doubt as to its existence. Certainly I now refer only to catarrhal jaundice as a separate disease by itself.

There may be some who will contend that a lowered state of health predisposes us to any disease. That such is not invariably the case, I need but refer the reader to pneumonia and typhoid fever—two diseases, in my opinion, allied in more than one respect to the malady in question. Pneumonia, as well as typhoid fever, frequently select their victims from just the most vigorous and healthiest class of individuals, while my experience has taught me the opposite to be the case in catarrhal jaundice.

The disease may begin either abruptly or insidiously. A severe chill, followed by high fever, often remitting in character, and sometimes simulating acute malarial fevers, vomiting, and some pain, more frequently a dull ache or a feeling of fullness in the hypogastric region—mostly round the umbilicus—may usher in the malady. Or the patient complains of general malaise; his appetite is waning, a peculiar heaviness and lassitude, an unaccountable weakness, perhaps with some slight fever and headache, a coated tongue and nausea, and an annoying sensation of something wrong in the middle of the abdomen, are the first or prodromic stages of the complaint. And it seems to me as if the more acute initiatory symptoms, the more violent its onset, not only the longer the pathognomonic signs of the disease wait with their appearance, but also the graver is the prognosis *quoad vitam*, as well as regarding the duration of the illness, while the more insidious the beginning, the more rapidly the disease develops itself and the more quickly it runs its milder course.

Whatever the beginning, whether acute and violent or insidious and mild, the following is sooner or later, with variations only as to degree, the further course of the disease: Jaundice, with all its concomitant symptoms, sets in. The pulse becomes slow and full; the skin and the conjunctivæ assume a yellowish tint, from the palest straw and lemon-yellow to—in very grave cases—a dark olive-green; the patient is suffering from itching; the fæces become dry, hard, and white, or in milder cases clay-colored, and the urine, loaded with biliary coloring-matter and other constituents of bile, assumes a dark-brown tint, and the color-test with sulphuric acid reveals the well-known variegated hue. Another test, recently discovered by Fenwick,* is of value not only in diagnosis, but also in prognosis. Fenwick

has found that in persons suffering from jaundice sulpho-cyanide of potassium disappears in the saliva, and that the earlier in the disease, the more thoroughly and the more continuously this salt is absent, the graver the malady; while even when all the other symptoms still are fully developed, the reappearance of sulpho-cyanide of potassium in the saliva is the surest evidence of beginning amelioration. While concerning the cause of this phenomena, and concerning other questions of interest in connection with the fact stated, we must refer to the original, we will mention the test itself.

The quantity of the salt present in healthy saliva is so small, that a quantitative analysis, especially for the practicing physician, is not to be thought of. The best way, therefore, is the following: Normal saliva is condensed one-half, or one-fourth, by evaporation, or diluted, doubled or quadrupled by the addition of distilled water. Then, to these different specimens is added a small quantity of chloride of iron. According to the percentage of sulpho-cyanide of potassium in the saliva, a discoloration—darker or lighter, as the case may be—will then take place, while none ensues when the salt referred to is absent. These test-solutions once inspected, the addition of chloride of iron to suspected saliva will at once reveal the increase or decrease of the sulpho-cyanide of potassium in the latter.

Aside from the symptoms mentioned, there still is another, perhaps always present and differing but in degree. It is the pain in the hypogastric region. It sometimes is very severe, the patient can scarcely breathe, for the stitch or sharp cutting pain in the region mentioned; this pain is then generally associated with decided tenderness at the same place, and on percussion a dullness over it is elicited, and on palpation a round, or oftener oblong, and more or less hard tumor is felt.

The text-books generally teach that the liver is enlarged. It appears to me that this statement is based more upon theory than upon practice. In some cases I found this organ augmented in size, about one inch and a half below the ribs; in one fatal case there was an enormous increase in size; but in most cases I noticed the liver either to be of normal appearance or smaller. If my observation is correct, if no accidental circumstances favored the recurrence, then the liver seems in those cases not to evince a larger area of dullness, in which the gall-bladder is especially increased in volume. I suppose it is superfluous to indicate that the tumor of which I made mention is the enlarged gall-bladder.

* S. Fenwick, Med. Chir. Transact., lxx.

Many cases run an exceedingly mild course, and, I may add, one very rapid. Others, again, drag on for several years, and some of these never recover totally, but die of some intercurrent disease. Then there are cases which end fatally. To judge of a series of 119 cases, most of them clinic and hospital cases, about 60 per cent. recover within two or three months (about 25 within one month, 20 within six weeks, and the remaining fifteen over two and less than three months), perhaps 27 per cent. are exceedingly chronic, lasting from six months to several years, and the remaining 13 per cent. die. But of so many of the second class the final termination is unknown to me, that very little reliance can be placed on these figures. Different are the figures from private practice. Of 46 cases, either seen in consultation or attended at their homes or in my office by me, 34 recovered within two months (15 within four weeks, 11 within six weeks, 8 within from six to eight weeks), 7 recovered within six months (1 within three months, 4 within four months, 1 within five months, and 1 within 25 weeks), three had not recovered within a year (one did so within eighteen months, Carlsbad having cured him; two, who had not been freed of their trouble within about a year, were lost sight of), and two died (one within three months, the other seventeen months later, when nearly cured, of apoplexy).

Treatment has undoubted influence on the course and result of the disease. And it seems to me that many a patient suffering from catarrhal jaundice would much sooner recover from his malady, were it not for the too early, untimely, and wrong use of cholagogues. I believe that few of the not fatal cases would be ever ailing longer from this disease than, say, six to eight weeks, if they were correctly treated, or at least, if they were not treated at all, but let alone. It was a remarkable fact, deduced by me mainly from clinic patients, that those homeopaths, who honestly administer their infinitesimal doses according to their dogma, are more successful in their treatment of these patients, and cause much less injury than the average regular practitioner; while those hermaphrodites of homeopaths, with allopathic doses (using corrosive sublimate, calomel, etc.) cause the greatest mischief, as they employ at the wrong time the most dangerous remedy, without possessing the somewhat counter-acting greater knowledge of the regular physician, who, understanding the pathology of the disease, does at least not fail to have an eye on the kidneys, while the symptom-hunting ignor-

amus concentrates his whole attention on the removal of the bile by the bowels.

While the treatment I have employed is neither original with me, nor infallible, a considerable experience has proven to me that it is the most successful—and never injurious. I have under it never seen a patient become worse whose prognosis was favorable. As there are many points to be elucidated, I will try to be as concise as possible.

If a case has an acute and violent beginning, and the diagnosis can be early made, I administer to the patient a fever-mixture, as, for instance:

R.	Spirit mindereri,	f. $\frac{3}{4}$ v.
	Spirit ætheris nitrosi,	f. $\frac{3}{4}$ j.
	Tinctur. radiceis aconit.,	℥ xxiv.
M.	S.	

Of this, I let the patient take a tablespoonful every three hours in half a tumblerful of sweetened orange-water, lemonade, Selters or Apollinaris water, until the fever has ceased. Occasionally the dose of the aconite has to be diminished. If the patient is very plethoric, if the fever is high, the pulse full and somewhat hard, the face looks flushed, I bleed him at the arm, taking from twelve to sixteen ounces of blood. These cases are rare; I had but once occasion to employ this procedure; the case, though apparently grave, immediately began to improve, and was well within four weeks. If there is much nausea, or even if there is little, but the tongue heavily coated, or if there is occasional vomiting, I administer a tablespoonful of mustard in a bowl of tepid water, or a hypodermic injection of apomorphia. I wish to caution against tartar-emetic, to be used for the same purpose; in my hands it has at least met with bad results. If the fever is intermittent (very, very rare), or remittent (frequently), and above 101°, I prescribe quinine, a few large doses (twenty grains) once every twenty-four hours.

If the case has an insidious beginning, then I put the patient at once upon the same treatment that I employ in the acuter cases after the fever has ceased.

But no matter how the case is ushered in, as soon as I am positive as regards the diagnosis, I order the local application of from six to twelve European (or twenty-four to forty-eight American) leeches. If there is no special point douloureux or local tenderness (if there is, they are applied as near as possible to it), I have the leeches applied in the hypogastric region, just above the umbilicus and slightly more to the right side of it.

The diet consists of milk, beef tea (bouillon), oatmeal gruel (strained), bread soup, and the like,

given at regular intervals. With the bowels or the excretion of the kidneys (save as by the medicine above referred to), I interfere only when necessity demands such a procedure. Either oleum ricini, or Glauber salt answers in such a case the first, and acetate of potash the second purpose.

When the acute symptoms have ceased, or have never been present, then my treatment is as follows: Here I must dwell for one moment upon the pathology of the disease. What is the morbid condition of the patient? We have an inflammation of the mucous membrane, usually beginning in the small intestines at the pylorus, often in the lower segment of the stomach, and extending thence along the ductus choledochus communis into the gall-bladder, and frequently all the way up along the biliary ducts. The mucous membrane inflames, swells. In consequence of this condition the ducts are narrowed (in fatal cases, *i. e.*, fatal from this cause, the ducts become perfectly occluded, and I have seen in more than one case, where the common duct appeared as if pasted tightly shut) and impede the passage of the bile. The severer this inflammation, this swelling, the less has the bile a chance of passing through. We have, therefore, here nothing wrong with the manufacture, the secretion of the bile—that is undisturbed; but the normally secreted bile cannot get out! In consequence of this condition, the secreted bile partly enters the circulation; its pigment is deposited all over, and the urine becomes loaded with it, as it is the function of the kidneys to take this obnoxious substance out of the blood. If the impediment to the outflow of the bile is too great, lasts too long, or is insurmountable, and if the kidneys are not able to relieve the blood of this poisonous substance, then intoxication of the system by bile takes place, and under symptoms of delirium and coma (due to the presence of bile in the blood) death sets in, after the body has been saturated with bile, the blood depositing it all over, so that a deep-green discoloration of the skin and of nearly every organ ensues, and after great emaciation.

Would it be any use in such a case, while the bile-ducts are nearly occluded, to give a cholagogue—a remedy which, like calomel, stimulates the excretion of the bile? If we still more stimulate its excretion, its flow to a place where nature does not want it, as there is at present no outlet, we simply increase the inflammation still more, irritate and cause a greater swelling of the already inflamed and swollen mucous membrane, and interrupt and divert the effort of nature to reduce to a minimum the flow of the bile through

its natural outlet. We must avoid every remedy that would the least stimulate the excretion of the bile. But what shall we do instead?

Assist the effort of nature to rid the blood, and by it the system, of the obnoxious bile by way of the skin and, mainly, of the kidneys. And it is wonderful to note how long the human organism may exist with the common bile-duct nearly impermeable, with every avenue, open for circulation, choked with bile, if only the skin and the kidneys properly perform their duties.

We must, therefore, try to reduce the swelling of the membranes and the inflammation that caused the former. After the leech-bites have healed, I know of no better remedy to achieve this object than by acting on skin and kidneys, as we shall soon see, and by applying a large fly-blister ($\frac{7}{8}$ inch) over the seat of the lesion. Often I apply a second, and sometimes a third blister, always waiting for the skin first to heal, but more frequently after the second or third blister, I have half a drachm of mercurial ointment rubbed into the abdominal wall every day or every second day, certainly taking care not to cause salivation. But it is amazing, the quantity of such an inunction that the skin will gradually absorb in these cases, as well as in others, where absorption is our aim, without bringing about salivation. I am convinced that many a patient of mine has derived incalculable benefit from this treatment.

Then I prescribe two remedies: acetate of potash, one drachm four times daily in a large quantity of water, my usual prescription being:

R. Potassii acetatis, f. ℥ij.
Tinctur. nucis vomic., ℥xlviij.
Glycerin.
Syrup rubi Idari, āā q. s. ad. f. ℥vj.
M. S.

Two teaspoonfuls of this medicine, to which the glycerin and the raspberry syrup are added only to improve the taste of it, and the nux vomica to allay any irritability of the stomach, contain exactly one drachm of the acetate of potash; this dose is administered in a large tumblerful of water (if possible, Apollinaris) four times daily.

Further, I order two teaspoonfuls of Carlsbad salt to be taken every morning on an empty stomach. But to insure the real effect of this almost specific remedy, certain conditions have to be fulfilled. First, for this purpose I never use the effervescing salt; I employ either the imported, genuine, or, with still greater preference, the artificial Carlsbad salt. As it is difficult to dissolve, as it should be taken lukewarm, in a large quantity of water and in a certain manner, I advise my patients as follows: They are to take a goblet

of the size of a large beer-glass; into this they put the two heaped teaspoonfuls of artificial salt, leaving the metal spoon in the glass to prevent it from cracking; then the glass is *slowly* filled with boiling water, and the solution continually stirred. If these last two precautions are not observed, a part of the mixed salt will recrystallize, and not dissolve in the quantity of water prescribed. Then the glass is covered with a saucer, and kept over night in the bedroom of the patient, who in the morning on awakening, say, for sake of illustration, seven o'clock, once more stirs his Carlsbad water, and then drinks the sixth part of it. Ten minutes later he takes the second sixth, and, if he is now able to leave his bed, as most are, he rises, and while washing and dressing himself, he sips the third sixth. Then he goes into his yard, or in inclement weather into the largest and best-aired room in the house, and walking up and down he drinks every ten minutes another sixth, so that within about half an hour the Carlsbad water has been swallowed. The patient must then wait half an hour with his breakfast.

As long as the passages don't weaken the patient, as recognized by the pulse and by his own feelings, the number of the stools from this two-drachm dose of Carlsbad-salt, whether they are two or six, has no importance; the moment they become weakening, a fact rarely noted, the dose is accordingly decreased. It often happens in the beginning, especially in chronic and maltreated (with calomel) cases, that the patient will vomit for the first two, three or four mornings, and also occasionally later; such an occurrence is always followed by the most beneficial result. Nothing but bile, mostly dark green, and coming in clots, is emitted, and both facts are alike remarkable—the excessive quantity of bile thus thrown up, and the great relief ensuing; the tongue at once becoming clean and moist, and the appetite returning, the pain in the hypogastric region diminishing. Within a week, in most cases, the stools commence to assume a greenish tint, which daily increases in intensity; and in the same ratio the yellow discoloration of skin and conjunctivæ gradually recedes, and the urine becomes clearer, and the pain in the abdomen vanishes.

To assist nature still more, I have the patient take a steam-bath every night on going to bed. As one or the other of the younger practitioners may not be familiar with the easiest and cheapest method of procuring such a bath, I will explain my *modus operandi*. The room in which the patient is to take the bath is brought to a temperature of 74°, as determined by the thermometer—to pre-

vent chilling; the patient, perfectly naked, sits on a high cane-seat chair and is totally enveloped in a large blanket, pinned tightly round the neck, his feet resting on the blanket, and the latter covering him and the chair, and the little space within it air-tight. The blanket is so arranged that the open fold is at the back. Under the chair stands a bucket, or a small tub, half filled with cold water. Into this tub or pail gradually, one after another, three half-pieces of "red hot" brick are thrown, and the blanket is at once again folded up. Certainly, as soon as the hot bricks come in contact with the water, a sudden and rapid evolution of steam takes place, which, being confined to the small space within the blanket, soon causes the patient to fall into a most thorough sweat. The first and second time the skin does not respond very actively, but with every day the perspiration increases. If the patient feel uncomfortable—his hands, etc., all being confined within the blanket—the nurse will give him a mouthful or two of cold water to drink, and sponge off his forehead and face with a sponge dipped into cold water. These two procedures give a great relief.

When the patient almost is through with his forced perspiration, one of the attendants takes a hot iron and goes over the bed-sheets with it, so as to warm thoroughly the bed of the sick person. A hot iron wrapped in rags, or a bottle filled with hot water, may be put at the foot of the bed. Then the patient is released from the "sweat-box," and immediately a large bed-sheet, which has been during all this time hanging near a fire, is thrown over him, and he thoroughly dried. Dressing himself in his warmed night-garments, he retires to his warm bed, while the steam-bath apparatus is removed, and the blanket hung out to be aired and dried.

I have been so particular about these directions, first for the reason given above, and then because I wish to impress the reader with the necessity of using the utmost caution that the patient during this procedure does not become chilled. While I have seen the greatest benefit arise from this steam-bath, and improved with it cases that did not seem to yield to any other mode of treatment, I have observed irreparable injury being done for want of the caution alluded to. In one case I am positive that a patient had a relapse and died within twelve days, because, when coming out of the bath and feeling so well, as he had not for many a long day, he had run, "just for the fun of the thing," after a friend out into the cold entry.

When the pain all has ceased, when the fæces have had a green color for a week without interruption, then I give the patient every fifth or sixth day, in the evening, from five to ten grains of blue mass, followed in the morning by the usual dose of Carlsbad salt. Then, *but only then*, mercurial preparations, especially blue mass and calomel, are excellent remedies, and have no small, if not the most, share in ridding the patient of his disease. But never, under any circumstances whatever, should a mercurial preparation be given in this malady in the earlier stages, or at any time before the symptoms, as mentioned, warrant their beneficial administration.

The question regarding stimulants, diet, and tonics, has been often raised. With reference to stimulants, my experience has taught me totally to avoid them in catarrhal jaundice, as they aggravate the disease. They may be indicated in a confirmed drunkard, but there they may be given as well as anything else, as no such patient, with a full-developed case of this illness, will ever survive, and if he does so, he will soon succumb to pneumonia or some form of liver or kidney disease. I have seen four cases of this jaundice in drunkards; three died of the disease, the fourth could have been perhaps said to have recovered from it, when he rapidly died in consequence of sudden cessation of the functions of the kidneys.

The diet I recommended in the beginning of my lines on treatment, I continue all through; but I add later toasted or stale bread, with butter, eggs, broiled meats, and fresh vegetables, especially salad—in general, a tonic regime.

For tonics I have found no special occasion. Usually in an uncomplicated case of catarrhal jaundice with no organic lesions, the appetite rapidly returns and becomes almost ravenous with the permanent reappearance of bile in the stools. But I have been in the habit of administer about that time tonic doses of quinine; sometimes I prescribe the ferrated elixir of cinchona, and let the patient take three grains of Jensen's pepsin in an acidulated mixture three times daily immediately after meals. If the weather permits, outdoor exercise is as beneficial for convalescents in this as in any other disease, though special precautions against dissipation and against exposure to the chilling influence of a cold and damp air should be always insisted upon.

507 Franklin Street, Philadelphia.

—Dr. Lermoyez, of the St. Louis Hôpital, Paris, recommends the hypodermic injections of ether for the cure of lupus, and reports successful results.

THE TREATMENT OF SOME OF THE EFFECTS OF SEXUAL EXCESSES.

BY JOSEPH L. BAUER, M. D.,
Of Lehighton, Pa.

(Continued from page 582.)

When I first commenced to devote my attention to urethral surgery, I was under the tutelage of a reputable surgeon, who was well skilled in urethrotomy. Whenever a patient presented a gleet discharge, the bulbous bougie was introduced, and a membranous stricture discovered. One thing struck me invariably, namely, that this stricture was always about the same distance from the meatus, and was not necessarily connected with much pain; and additionally, that the distal end of the bulb was usually covered with a discharge. The surgeon, in a post hoc ergo propter hoc reasoning, concluded that this fluid came from the pouch behind the stricture. I was apparently, therefore, as taught by the new surgery, on the right track. But, unfortunately for myself, I have never missed this fold. It was usually at about the same place, and, in fine, my patients got well without disturbing it. Hence, I have endeavored in every way possible to rectify my prejudices, but I can see no reason to change my views expressed in the January 27, No., 1883, of your journal.

I will not occupy the space of your journal with a lengthy resume of cases. My effort has been to show, that inasmuch as the effects of sexual excess are displayed upon the nervous system, we may rely almost solely upon a few remedies to alleviate whatever results ensue. In order, therefore, to appreciate the method I adopt, I will enumerate the remedies as follows:

1. Ergot or ergotine.
2. Bromide of potassium or sodium.
3. Nitrite of sodium.
4. Hydrate of chloral.
5. Elixir of strychnine, iron and calisaya.
6. Tinct. ferri muriatici.
7. Urethral injections of ext. opii aquosi.
8. Urethral suppositories of iodoform.
9. Steel sounds.
10. Suppositories of ext. opii aq. and ext. belladonnæ in the rectum.
11. Ice suppositories.
12. Continued current of electricity.
13. Faradic current of electricity.

Ergot, or ergotine, in conjunction with either bromides, nitrite of sodium, or chloral, has an excellent effect. The former remedy has a special effect upon the blood-supply of the generative tract, as well as upon the depot of sexual force,

the spinal cord. The latter remedies are sedatives and antispasmodics. These medicines are used whenever general nervous conditions are manifested, or where there are any signs of an irritative tendency; for instance, headache, insomnia, flatulence, constipation, nerve twitchings, painful erections, or nocturnal emissions. I usually commence with small doses of the bromides (say ten grains) and increase gradually. The nitrite of sodium is started with two-grain doses, and increased in $\frac{1}{2}$ grain quantities. I have found the latter salt to have had a remarkable effect upon nerve spasm. Some time since it was recommended for angina pectoris, and believing with a celebrated German physician that asthma was a spasm of the diaphragm, I used it in two cases of this disease with permanent success. This tempted me to apply it in the cases under discussion. In a case of a young man, æt. 24, who suffered with frequent nocturnal emissions, the dose was raised to six grains thrice daily, the effect being satisfactory. Strychnine, iron and calisaya, are used when there is general prostration or asthenia. Tinct. of iron when anæmia is present. Urethral injections of ext. opii aquosi, suppositories of iodoform, and the steel sounds, whenever there is great hyperæsthesia of the urethral mucous membrane. Rectal suppositories of opium, belladonna, or ice, whenever there is tenderness of the prostate or symptoms of increased nerve irritation in the prostatic urethra, resulting in nocturnal emissions, painful erection, lascivious dreams, or prostatorrhœa. The continued current of electricity, whenever the remedies suggested above must be aided, or there is a co-existence of partial impotency, depending upon a failure to complete the sexual act, or there is a rapid emission immediately after intromission. The faradic current is used whenever there are symptoms of diminished nerve stimulus resulting in impotency, or where the steel sound may be introduced into the urethra with the bare perception of the patient. The two following cases will illustrate the results of treatment:

Case 1. F. B., of Missouri, called upon me at one o'clock in the morning. He was afraid he would die; well were his fears grounded. He was suffering from palpitation of the heart; indeed, this organ was temporarily an engine—it beat ferociously against the wall of the chest; he could not lie down or sit up; he was suffering from want of air. A rapid examination failed to disclose any organic lesion. I prescribed hydrate of chloral 15 grains, bromide of potassium 20 grains, extract hyoscyamus fl. gttss. iss. per dose,

to be repeated in one hour unless rest ensued. I requested him to call next morning for more careful examination.

Two doses were requisite to produce a comfortable sleep. I made a careful examination of the heart, the result of which was negative. Having a few days previously examined a medical student—a confirmed masturbator, who was suffering from the same cardiac peculiarity, as well as the delusion that modern physiology stood upon an erroneous basis—I directed my attention to his sexual organs. I was assisted by my friend, Dr. C. L. Flannigan, of Minneapolis, Minn. The patient had not had intercourse with his wife for two months previously, though prior to that time his appetite was frequently appeased. He had never had gonorrhœa, nor had he ever masturbated; prior to complete cessation of the marital act, emission occurred immediately after intromission, and seminal ejaculation caused considerable pain in the prostatic urethra; urination was slightly painful; there was pain in the perineum, and tenderness of the prostate gland. Whenever defecation of a hard stool took place, a slight oozing occurred from the urethra. There was constant lumbago; general nervousness, headache, and mental depression. Examination of the urethra was difficult, owing to its extreme sensitiveness. I prescribed bromide of potash, hyoscyamus, and ergot, and introduced a urethral suppository of iodoform daily for five days. By this means I succeeded in alleviating the urethral sensitiveness, so that I could make a more careful examination. A bulbous bougie was introduced into the bladder, and withdrawn. This determined the usual sensitiveness of the prost.-urethra, and a membranous fold $4\frac{1}{2}$ inches from the meatus. I continued the use of the bromides, added thereto suppositories (rectal) of opium and belladonna, and frequently introduced the steel sound. These measures sufficed to accomplish perfect relief.

Case 2. C. D., a youth æt. 20, consulted me for supposed *AUSZEHRUNG* (consumption). He had cough with mucous expectoration; he had a sallow, attenuated appearance; he was constantly losing flesh. An eruption of acne pustulosa, as well as his peculiar facial expression, tempted me to suggest sexual disease. He acknowledged that he suffered from constant nocturnal emissions, sometimes occurring twice in one night. This, of course, tended to make a natural dunce still worse; indeed, a better picture of brainlessness could not be painted. There were general symptoms of nervous excitement, as well as collapse. Auscultation revealed moist râles in the larger

bronchi, but nothing further. I prescribed twenty-five grain doses of potass. bromid., with one and a half drop dose of ext. belladonn. fluidi thrice daily, and suggested a few of the customary hygienic rules. This treatment kept off all emissions for three weeks, and he improved in weight and appearance. Unfortunately a spree followed this improvement, and the old condition returned. I then prescribed two-grain doses of nitrite of sodium, with one and a half drops of belladonna, gradually increased, with rectal suppositories of aqueous extract of opium. This had the desired effect, the patient having but one emission every two (2) weeks. I endeavored to make a urethral examination, but coaxing produced such a diabolical laugh, that I was compelled to desist.

In the *St. Louis Clinical Record*, I have frequently detailed cases illustrative of treatment, and have directed special attention to the use of the several currents of electricity; hence, I will refrain from it here. If I have succeeded in demonstrating once more that these cases can be treated with good effect by the general practitioner, and do not necessitate the purchase of expensive armories, I shall have accomplished the object of this article.

WORK OF WOMEN PHYSICIANS IN ASIA.*

BY MARY H. STINSON, M. D.,
Of Norristown, Pa.

In the brief space of twenty minutes, we can note in the chain of events but a link here and there by which women physicians were drawn into the work in Asia.

We find a missionary society formed in 1799 to assist in increasing an interest in its work for the heathen, and in raising money for the same a woman's missionary society was organized in 1801. With the same object "Cent Societies" among women were active until 1815, when Maternal Associations were established throughout the churches, and flourished until about 1842. The Missionary Society of 1799 emerged into the "American Board of Commissioners of Foreign Missions," early in whose history it began its efforts to reach heathen women through the labors of single women. In 1817, two ladies were teaching among the Indians. Between that date and 1860, 104 were engaged in the same work, and thirty-six were teaching in other places.

All Christian denominations had strong convictions of duty toward the heathen. The Baptist Union Missionary Society was organized in 1815. The Presbyterian Church, in order to carry on and extend its missions, obtained a charter in 1837. It had previously founded two missions in India in 1834 and 1835; another in 1853.

The Methodist Episcopal Church found it necessary, to enable them to hold property and do business legally, to seek a charter, which was granted in 1839. They sent the Rev. J. S. Humphrey, M. D., to Kumaon, India, in 1857.

The American Reformed Church sent the Rev. E. C. Scudder, M. D., to South India in 1855.

The Rev. Edward Chester, M. D., was sent by the Congregationalists to Madura, India, in 1859.

In order to increase the number of medical missionaries in the societies of Great Britain, "A Medical Missionary Society" was organized in 1841 in Edinburgh, under the supervision of the celebrated physician and philosopher, Dr. Abercrombie.

Our first missionaries were ordained ministers of the Gospel. They took their wives and families, located stations, where grew up their dwellings, a place to preach, a school, and an orphanage. The language of the country was acquired, and the Scriptures translated into the vernacular of the country.

Soon it was felt that female teachers were a necessity, and self-sacrificing, earnest Christian women responded to the appeals for teachers.

March the 11th, 1850, there was chartered in Philadelphia "The Woman's Medical College of Pennsylvania," with a board of corporators. A faculty was organized, 52 students matriculated, and the first class of three women graduated as physicians in 1852.

In November, 1851, there was "A Ladies' Medical Missionary Society of Philadelphia," formed with Mrs. Sarah J. Hale as president. But few persons were advanced enough to comprehend for what purpose it was needed.

In 1852, Rev. Dr. Dwight wrote from Constantinople, "It is my present belief that a well-taught female physician in this place would find access to the families of all classes of the people, not excepting the Mohammedans."

In the session of 1853-54, in "The Woman's Medical College of Pa.," under the auspices of "The Ladies' Medical Missionary Society," were two women studying with the purpose of becoming medical missionaries. Emiline Horton and Elizabeth Shattuck were the first women who had

*Read before the Pennsylvania State Medical Society at its meeting in Philadelphia, 1884.

decided upon medical missionary work in Asia. Providential circumstances prevented the first from entering that work. She became Mrs. Dr. Cleveland, and the first resident physician of "The Woman's Hospital of Philadelphia," established in 1860—the first hospital in the world equipped, officered, and managed wholly by energetic, philanthropic women—also the able Professor of Obstetrics in "The Woman's Medical College of Penna.," and the skillful practitioner so well known in this city. Dr. Shattuck was as one born out of due time. The Board of Missions of her church would not take the responsibility of sending her, not yet having realized the possibilities in the work of a woman medical missionary. For an account of her career, death, and a tribute to her worth, see "The College Story," by Prof. Rachel L. Bodley, A. M., M. D., Dean of "The Woman's Medical College."

American women, beginning to comprehend more fully the misery, degradation, slavery of caste, and idolatrous practices, were aroused to fresh zeal in behalf of their heathen sisters, and to a special interest for their education, which led to the formation in New York in 1860 of "The Woman's Union Missionary Society of America for Heathen Lands."

Among the teachers sent to foreign fields was Miss Brittan, who, after a year of careful inspection and study of the situation in Calcutta, opened fresh zenanas and commenced work in 1864 under the name of "The American Zenana Mission." Her plan and work were most admirable. We must quote her in another link.

The suppression of the mutiny of the Sepoys in 1859, the transfer of the government from the East India Company to the direct authority of the British Crown, the building of railroads, the establishment of an improved school system, dispensaries and hospitals with surgeons and staff of assistants, all tended to assist mission operations.

Coincidentally, or providentially, the necessities of the rebellion in our own country caused women, from its one extreme to the other, to pass through scenes and trials that called forth their sympathy, fortitude, and endurance. They became conscious of their power to relieve distress, to comfort the sick, the cast-down, and the sorrowing. Thus there developed an ability to coöperate successfully and to work collectively. Hence, when peace was restored, women were prepared to engage with renewed energy for their oppressed sisters, both at home and abroad. They also felt that they could work more effectually in connection with their several denominational boards of

missions. Therefore, at a meeting of the ladies of the Congregational churches in Boston, January 1, 1868, their "Woman's Board of Foreign Missions" was formed by only a few women full of faith and zeal; and within that month the Board was in active operation. By the 3d of February, \$500 were in its treasury, and the first woman missionary adopted.

"The Woman's Foreign Missionary Society of the Methodist Episcopal Church" was organized in 1869 by seven women, whose subsequent work seems like magic, as now the membership is 90,000.

Dr. Nutting, from Turkey in Asia, when speaking of the women of that country, said: "I am persuaded that in no way can so much be done for their elevation and enlightenment as by sending out among them well-educated, devoutly pious female physicians."

"The Woman's Board of Foreign Missions of the Presbyterian Church" was incorporated in 1870. In 1871 "The Woman's Baptist Foreign Missionary Society" was launched for the support of women missionaries.

These societies are the channels through which the collections of money by the various agencies throughout the length and breadth of the land are gathered for the support of the entire work of women missionaries.

(To be Continued.)

HOSPITAL REPORTS.

PHILADELPHIA POLYCLINIC.

SERVICE OF DR. ARTHUR VAN HARLINGEN,
Professor of Diseases of the Skin.

Reported for the MEDICAL AND SURGICAL REPORTER.

Cases of Scabies Treated by Naphtol.

Since the appearance of his article on the use of naphtol in the treatment of skin diseases,* Dr. Van Harlingen has continued to experiment with naphtol, and to employ it particularly in the treatment of scabies, with increasing satisfaction. The following cases illustrate the employment of naphtol in scabies:

Case 1. P. A. came to the Polyclinic on June 7, 1884, displaying well-marked, though not severe scabies in the usual localities. He had suffered from the affection for three months, but as he was very neat and cleanly in his habits, it had never gained an extensive foothold. He had used a number of remedies without much benefit. He was ordered the following:

R. Naphtol,	℞iv.
Ung. petrolei,	℞j.
M.	

Under the use of this treatment the patient re-

*American Journal of Medical Sciences, October, 1883.

covered rapidly, and was discharged cured within a few weeks. He afterwards came under observation for localized eczema of the back of the hand, but there was no return of the scabies.

Cases 2, 3, 4, and 5 were boys from a public institution in the city, who had been attacked almost simultaneously with scabies. When admitted for treatment they presented the disease in varying degrees of severity, but were all placed upon the same treatment, the following formula being prescribed:

R.	Naphtolis,	3 ss.
	Saponis viridis,	3 iss.
	Axungiae,	3 j.
M.		

Under the use of this, improvement was manifested in every case, but as the applications were in some instances very imperfectly made, while all the boys were removed at an early period to their homes, the final result was not noted. The rapid amelioration, however, and the abatement of the itching and of the inflamed condition of the skin, indicated the value of the remedy.

Case 6. J. M. W., a man of thirty, presented himself at the Polyclinic on February 28, with well-marked scabies of two weeks' duration, occupying the hands and flexures of the elbows, and also the foreskin and penis generally. The skin of the forearms and hands was in a state of acute inflammation, due to some caustic application. In order to allay this inflammation, a lotion of black wash with carbolic acid was ordered to be used over the most inflamed parts, while elsewhere, in localities where the burrows of the itch insect could be most plainly distinguished, the following formula was ordered to be used:

R.	Naphtol,	
	Saponis viridis,	āā 3 iss.
	Adipis,	3 j.
M.		

The dermatitis yielded quickly to the sedative treatment, and the scabies was rapidly cured, but the patient was so pleased with the effect of the naphtol ointment that he substituted it, after some days, for the black wash, and used it for several weeks over the entire surface of the arms. He then returned without any sign of scabies, but with a rough, irritated condition of the skin of the arms, due, probably, to the sapo-viridis contained in the ointment. This ingredient having been removed and a simple ointment containing a drachm of naphtol to the ounce of lard having been substituted, the irritation rapidly subsided, and the patient soon after disappeared, the eruption when he was last seen having almost entirely disappeared.

Case 7. A traveling salesman applied for treatment on March 13 with scabies of six months' standing, for which he had sought relief from various sources in vain, probably because the nature of the disease had not been suspected. The affection was well marked, involving the backs of the hands, flexure of the elbows and inside of the thighs. He was ordered the following:

R.	Naphtolis,	3 j.
	Saponis viridis,	3 iv.
	Adipis,	3 j.
M.		

This ointment the patient applied so effectually

that within two weeks he was entirely cured, a slight eczema only remaining.

The result of the naphtol treatment in these cases has been so happy that Dr. Van Harlingen is led to believe it the best application for the cure of scabies which has yet been brought forward. It has one great advantage over sulphur, the remedy ordinarily employed, in the fact that it has no marked or disagreeable odor.

With regard to the combination of naphtol with sapo viridis, Dr. Van Harlingen considers the latter a useful adjuvant, particularly in thick-skinned persons, and at the beginning of the treatment, because it helps to break open the curricula or burrows in which the itch insect conceals itself, and lays it open to the action of the remedy. But in thin-skinned persons, and where the applications have been made too vigorously, sapo viridis will, at times, tend to arouse slight inflammation, and its use should, therefore, be restricted to the cases and period above mentioned.

Erythema Multiforme.

February and March usually bring a certain number of cases of erythema multiforme, herpes zoster, and purpura, to the clinic. Such cases are not numerous at any time; the statistics of the American Dermatological Association, collected by competent observers all over the United States, and including nearly sixty thousand cases, show a percentage of 1.16 for erythema multiforme, 1.37 for herpes zoster, and .463 per cent. for purpura. Consequently, such cases are rare at our clinics, and therefore deserve some note. The following case is typical of its kind:

The patient, a woman between forty and fifty years of age, presented herself on February 1, displaying an eruption which, from its striking character, had caused her some apprehension, although it gave rise to no bodily discomfort. The lesions, chiefly situated on the extensor surface of the forearms, were papular in character, of the size of a split pea to that of a quarter-dollar, smooth, flat, with a somewhat rectangular outline rising abruptly from the skin without any inflammatory areola, and presented a peculiar dusky, raspberry color. They were usually distinct and quite numerous. Here and there several lesions were observed coalescing into a larger, irregular patch. There were no scales.

A somewhat similar eruption was observed on the face. The eruption was of about four days' duration, and was evidently at its height. The patient described it as coming out almost suddenly while she had her hands in hot water washing clothes. She also declared that it itched, but as there were no marks of scratching, the pruritus could not have been very severe. She was subject to rheumatism, was constipated, and suffered from headache.

The patient was ordered an aperient tonic mixture—the well-known “mistura ferri acida”—composed of sulphate of magnesium, sulphate of iron, sulphuric acid, and infusion of quassia. Nothing was heard from the patient after her first visit until March 28, eight weeks later, when she reappeared with a fresh outbreak of the same eruption. She said that the first eruption had entirely faded away within two weeks of her visit

to the Polyclinic, and had showed no sign of a return until March 26, two days previous to her present appearance. It then began by the appearance of characteristic lesions under the eye, which increased rapidly in numbers and invaded the whole face. The backs of the wrists and hands were also involved, and when examined, showed numerous lesions similar to those described above, but of smaller size, none exceeding a dime in diameter. On this occasion, there was a feeling in the eruption as if the skin had been struck by a bunch of nettles, and a curious elongated lesion was found occupying the line of a scratch an inch or more in length. Loss of appetite, nausea, and general malaise, were among the symptoms. There was some little stiffness about the ankles, but no decided rheumatic symptoms.

The patient was once more placed upon treatment, and soon entirely recovered.

This case has been detailed because the lesions are of such a marked character, especially as regards their lurid color and because it might readily be mistaken for other diseases of a far more serious nature.

Erythema multiforme is usually marked by the variety of its lesions; there may be erythematous patches, vesico-papules, and tubercles. The peculiarities of configuration which the lesions assume have given rise to the terms annulare, iris, and marginatum, according to the shapes assumed by the grouped lesions. Dr. Stelwagon, of this city, reported, a year or two ago, a case where the entire trunk was covered by gyrate and annular forms, giving a wonderful picture of tattooing when viewed from a little distance, the centre of the lesions changing color as involution takes place.

The course of the disease is usually acute, lasting for a few days, at the end of which time it disappears spontaneously, a fact which should be borne in mind when trying new remedies. Erythema multiforme usually attacks the backs of the hands and feet, the arms and legs being the localities commonly invaded. It also shows itself about the face, as in the case described. The subjective symptoms are rarely troublesome. Notwithstanding the angry inflammatory look which the eruption wears, it seldom itches or burns to any extent. Rheumatic pains, digestive disturbance, and the general malaise, as in the case noted, are not unfrequently present, but in many cases the patient's health is quite undisturbed.

The occurrence of the disease in the spring and autumn is a very peculiar circumstance. Its occurrence in connection with rheumatism is also worthy of note. Digestive derangements are, however, never common in the etiology of skin diseases, and to find these in connection with the affection under consideration, is by no means peculiar in this respect.

Pathologically, erythema multiforme is closely allied to herpes zoster, purpura rheumatica, and urticaria, the entire group of diseases being connected in some way with disturbances of the nervous system—in other words, being “angio-neurosis,” or “tropho-neurosis.”

The diagnosis is sometimes a matter of importance, chiefly because erythema multiforme is liable to be mistaken for more serious and annoying

affections. The absence of violent burning or itching sensations will serve to distinguish it from urticaria, the affection to which it bears the closest resemblance. Its color is also darker than that of urticaria, and there is no tendency to the production of wheals. The lesions of urticaria may disappear in an hour or so, while those of E. multiforme are persistent. From papular eczema the treatment and prognosis of which affection is so different, E. multiforme is distinguished by the absence of severe itching, the large size of the papules, and by its place of election. Eczema papulosum rarely occurs confined closely to any one locality. Erythema nodosum is to be distinguished from E. multiforme by the large, rounded, firm tumors or nodes, which are most apt to occur along the line of the tibia.

Those who lay too much stress on “coppery color and absence of itching,” as a diagnostic symptom in syphilitic eruptions, may find both of these to perfection in E. multiforme. The general history and a careful examination of all the lesions will, however, always show the lack of some characteristics of syphilis.

Eczema Genitalium.

Eczema of the genital organs, whether occurring in the male or female, is one of the most distressing skin diseases with which the physician has to deal. The following case of moderate severity shows the method of treatment followed by Dr. Van Harlingen in this class of cases, although each case requires special management, and the treatment suitable for one form of eczema of the genitals may be quite unavailing when the lesions are of a different character.

Margaret McG., sixty-four years of age, a white-haired Irish woman, unmarried, presented herself for treatment on March 18. She had a worried, anxious look, and declared that she had not been able to sleep for weeks on account of an “itch” in the genitalia. On examination, the external genitalia to the interitus vaginae, and the skin over the pubis and the thighs near by, were found to be the seat of well-marked eczema, assuming the erythematous form within, where the mucocutaneous surface was red, dry, and hot looking, and taking on rather more the appearance of eczema sutrum on the skin around, with a fringe of small papules in the neighborhood. There was slight eczema of the lower eyelids, but no sign of eczema elsewhere over the body. The patient presenting no general derangement of the system, and no abnormal discharge from the vagina, a purely local treatment was ordered. She was told to sponge the genitalia with hot water thrice daily, as a preliminary to making the other applications. Taking a small basin filled with water as hot as could be borne by the skin, this was applied by means of a small sponge tied to a stick, the water being dabbed on in small quantities, and the applications being made in rapid succession for five to ten minutes. A jug of boiling water was to be kept at hand, portions to be added from time to time, in order to keep the temperature up to the highest point bearable. It is extraordinary how high a temperature can be borne by these inflamed surfaces; a sponge soaked with such hot water that it cannot be held in the hand, will be readily borne by the mucocutaneous covering of the labia, and will give relief to the itching when

nothing else will. The application of water being finished, the patient was then directed to pour a small quantity of black wash into a saucer, previously shaking it well, and to apply this to the entire diseased surface by means of a linen rag—not a sponge. After the parts had been well bathed, small rags soaked with black wash were to be placed within the vagina, and between the labia, while the cutaneous surfaces of the pubis, groins, and thighs adjacent were to be smeared over with the following ointment:

R. Ung. zinci oxidi.

Ung. petrolei,

aa ̄ ss.

M.

Under this treatment such rapid improvement took place that the patient was enabled to gain a good night's rest after the first day, and within three weeks was so far advanced toward recovery that she inquired at her last visit if any more treatment were necessary. Commonly, however, a more prolonged course of treatment is required, and we may not usually expect to cure cases of this kind without some internal treatment. The affection is to be differentiated from pruritus, which it sometimes accompanies as a secondary affection. Pruritus is a much more stubborn malady.

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Clinical Aspects of Cerebral Syphilis.

Read by HORATIO C. WOOD, M. D., Professor of Diseases of the Nervous System in the University of Pennsylvania.

In the present article I propose to say very little in regard to the lesions of cerebral syphilis, only making such allusions as are necessary to the clinical study. So much practical importance attaches to the etiological relations of the disorder, that I shall discuss these at some length.

We do not know why syphilis attacks one portion of the brain rather than another in any individual case; indeed, very rarely can we give any sufficient explanation why the brain is affected at all.

It is naturally to be expected that any cause of ordinary brain inflammation would, when present in a syphilitic person, tend to precipitate a specific cerebral disease. Thus, as thermic fever frequently provokes chronic meningitis, much plausibility attaches to the report of a case in the *Journ. de Méd. et Chir. prat.*, Paris, 1879, p. 291, where the cerebral syphilis is ascribed to a sunstroke. Blows and other traumatisms would, in a similar manner, be supposed to figure largely as exciting causes of brain syphilis; but I have never met with a case having such relations, and reports of them are rare in literature. The only records I have found are the cases reported by Dr. Broadbent, *London Lancet*, 1876, ii., p. 741, and a small collection in Huebner's article on Nervous Syphilis, in Ziemssen's *Encyclopaedia*, xii. 301. I have seen two cases of presumably traumatic spinal syphilis; one in which a polio-myelitis* followed a fall on the ice; and one in which,

after a fall from a cart, and marked spinal concussion, a local myelitis developed. (*Univers. Hosp. Dispen. Service Book*, x. 1875, p. 58.)

Various authorities attach much influence to over-study and other forms of cerebral strain in exciting brain syphilis. Engelstedt is stated to have reported cases having such etiological relations, and Fournier (*La Syphilis du Cerveau*) affirms that he has especially seen the disease in professional men and other persons habitually exercising their brains to excess. Neither in private or public practice have I met with any instance where over-brain-work could be considered a distinct etiological factor, whilst the wards of the Philadelphia Hospital and the roll of the University Dispensary are full of cases occurring in persons who use not at all the modicum of brains nature has endowed them with. So far as my observation goes, cases of brain syphilis in which any exciting cause can be found are very rare.

The inherited diathesis is less prone to manifest itself in the nervous system than in other portions of the body, but it certainly is capable of causing every type of nervous disease that follows infection from impure coition.

As early as 1779, Dr. Jos. Glenck (*Doctrina de Morbis Venereis*, Vienna,) reported a case of a girl, six years old, cured by a mercurial course of an epilepsy of three years' standing, and of other manifestations of hereditary syphilis. Graefe found gummatous tumors in the cerebrum of a child nearly two years old. (*Arch. f. Ophthalm.*, Bd. i., erst. Abth.) Prof. O. Huebner (*Virchow's Archiv.*, Bd. lxxxiv. 269,) details the occurrence of pachymeningitis hemorrhagica in a syphilitic infant under a year old. Dr. Hans Chiari (*Wien. Med. Wochenschrift*, xxxi. 1881, 17,) reports a case in which very pronounced syphilitic degeneration of the brain-vessels was found in a child fourteen months old. Both Dr. Barlow (*Lond. Patholog. Soc. Trans.*, 1877,) and Dr. T. S. Dowse (*The Brain and its Diseases*, vol. i, p. 76,) report cases of nerve syphilis in male infants of fifteen months.

It is a matter of great interest to know how late in life nervous disease from inherited taint may develop. We have, as yet, little light upon the equally interesting and cognate problem as to how far inherited syphilis may produce late in life nervous diseases, whose type is not distinctly specific; but it is probable that even after puberty specific nervous affections may appear for the first time in the unfortunate offspring of syphilitic parents. Mr. Nettleship reports (*Trans. Lond. Path. Soc.*, xxxii. 13) the development of a cerebral gumma in a girl of ten years, and Mr. J. A. Ormerod (*Ibid.*, p. 14) of a tumor of the median nerve (probably gummatous) in a woman of twenty-three, both the subjects of inherited syphilis. Dr. Thos. S. Dowse (*loc. cit.*, p. 71) details a case of cerebral gumma at the age of ten years, and Dr. Saml. Wilks (*Lectures on Dis. of Nerv. Syst.*, Philad., 1878, p. 333) one of epilepsy from inherited taint in a boy of fourteen. Dr. J.

tions upon the arm and the symptoms were peculiarly symmetrical; great coldness of both forearms; excessive sweating of the palms; loss of power, so much more pronounced in the extensors than elsewhere that the patient had been treated for lead-poisoning and great wasting of the extensor muscles. Evidently a symmetrical syphilis chiefly confined to the anterior spinal cornua.

*In this case the man had symmetrical specific skin eruptions.

Hughlings Jackson reports (*Journ. Ment. and Nerv. Diseases*, 1875, p. 516), paraplegia with epilepsy in a boy of eight, hemiplegia in a girl of eighteen, and in the *Brit. Med. Journal*, May 18, 1872, hemiplegia in a woman of twenty-two; the nervous affection in each case being associated with or dependent upon inherited syphilis. Dr. E. Mendel reports (*Archiv. f. Psychiatrie*, Bd. i., 313) a case of a child who had inherited syphilis, and developed in her fifteenth year a maniacal attack with hallucinations.

Some time since, I saw, in an orphan of fourteen, a chronic basal meningitis, and in the absence of any history, gave the fatal prognosis of tubercular disease; but to my astonishment, under the long-continued use of iodide of potassium, complete recovery occurred. No signs of inherited syphilis were perceptible, but the specific nature of the inflammation is, in view of the result, scarcely doubtful; it is probable that in some of the reported cases of alleged recovery from tubercular meningitis, the affection has really been syphilitic.

The relation of inherited syphilis to idiocy appears to be a close one. What role the diathesis has in the production of those cases which are dependent upon arrest of development, we have no way at present of knowing; but that it very frequently causes chronic hydrocephalus seems to be well established. A number of cases have been reported; they have been collected by Dr. E. Mendel, *Archiv f. Psychiatrie*, Bd. i., 309. For a very important paper, see also, Virchow's *Archiv*, Bd. xxxviii., p. 129.

Nervous diseases following acquired syphilitic infection certainly belong to the advanced stages of the disorder. Huebner reports (*Ziemssen's Encyclopedia*, xii. 298, New York edition) a case in which thirty years elapsed between the contraction of the chancre and the nervous explosion. I have seen a similar period of thirty years. Fournier reports intervals of twenty-five years, and thinks from the third to the tenth year is the period of maximum frequency of nerve accidents.

The fact that cerebral syphilis may occur many years after the cessation of all evidence of the diathesis, is one of great practical importance, especially when taken in conjunction with the circumstance that the nervous system is more prone to be attacked when the secondaries have been very light than when the earlier manifestations have been severe. I have repeatedly seen nerve syphilis in persons whose secondaries have been so slight as to have been entirely overlooked or forgotten, and who honestly asserted that they never had had syphilis, although they acknowledged to gonorrhœa or to repeated exposure, and confessed that their asserted exemption was due to good fortune rather than chastity.

To show that my experience is not peculiar, I may be allowed to make the following citations: Dr. Dowse (*The Brain and its Diseases*, London, 1879, vol. i., p. 7.) says, "Often have I had patients totally ignorant of having at any time acquired or experienced the signs or symptoms of syphilis in its primary and secondary stages, yet the sequelæ have been made manifest in many ways; particularly in many of the obscure diseases of the nervous system." Dr. Buzzard (*Syphilitic Nervous Affections*, London, 1874, p. 80,)

reports a case of nervous syphilis where the patient was unconscious of the previous existence of a chancre or of any secondaries. Prof. Riecke also calls attention (*Archiv. f. Psychiatrie*, vii. p. 241,) to the frequency of nervous syphilis in persons who afford no distinct history of secondary symptoms.

This frequent absence of history of specific infection is of great practical importance, and has led me to attach comparatively little weight to the statements of patients. In private practice I usually avoid asking questions which might bring up from the past unpleasant memories, and arrive at the diagnosis by studying the symptoms present.

Although syphilis is most prone to attack the nervous system many years after infection, it would be a fatal mistake to suppose that brain disease may not rapidly follow the occurrence of a chancre. What is the minimum possible intermediate period we do not know, but it is certainly very brief, as is shown by the following cases of this so-called precocious cerebral syphilis. Dr. Alfrik Ljunggrén, of Stockholm, reports (*Archiv. f. Dermatol. und Syphilis*, 1870, ii. p. 155,) the case of H. R., who had a rapidly healed chancre in March, followed in May of the same year by a severe headache, mental confusion, and giddiness. Early in July, H. R. had an epileptic attack, but he was finally cured by active anti-syphilitic treatment. Although the history is not explicit, the nervous symptoms appear to have preceded the development of distinct secondaries other than rheumatic pains.

Davaine is said (Buzzard, *Syphilitic Nervous Affections*, London, 1874,) to have seen paralysis of the portio dura "a month after the first symptoms of constitutional syphilis." Dr. E. Leyden (*Zeitschrift f. Klin Med.*, Bd. v. 165) found advanced specific degeneration of the cerebral arteries in a man who had contracted syphilis one year previously. Dr. R. W. Taylor details a case in which epilepsy occurred five months after the infection (*Journ. Nervous and Mental Dis.*, 1876, p. 38). In the case of M. X., reported by Dr. Ad. Schwarz (*De l'Hémiplégie Syphilitique Précoce*, Inaug. Diss., Paris, 1880), headache came on the fortieth day after the appearance of the primary sore, and a hemiplegia upon the forty-sixth day. S. L. (*Ibid.*) had a paralytic stroke without prodromes six months after the chancre. A. P. L. (*Ibid.*) had an apoplectic attack seven months after the chancre; A. S., one five months after her chancre. In a case which recently occurred in the practice of Dr. A. Sydney Roberts, of this city, the chancre appeared after a period of incubation of twenty-six days, and two months and eight days subsequent to this came the first fit; eight days after the first the second convulsion occurred, with a distinct aura, which preceded by some minutes the unconsciousness. The further details of this case are not germane to the present discussion, which only requires the additional statement that the attack developed into an unmistakable cerebral syphilis with temporary aphasia, and that convalescence was finally secured by active anti-syphilitic treatment. As the first paroxysm came on without warning, whilst the man was fishing in the sun, it is not unwarrantable to suppose that a precocious cere-

bral syphilis was in this case precipitated by exposure to the ordinary causes of sunstroke. This list of cases might be much extended, but it certainly is sufficient to show that cerebral syphilis occurs not very rarely within six months after infection, and may be present in two months.

An interesting observation in this connection is that Dr. Ern. Gaucher (*Revue de Méd.*, 1882, ii., 678) of a spinal syphilis occurring six months after the appearance of a chancre.

Syphilographers are in accord in regard to the existence of two pathological varieties of brain syphilis, whilst some authorities believe in a third form. The most common seat of attack is the membranes; next to these are the brain-vessels; whilst, as already intimated, there is difference of opinion as to whether the disease ever directly affects the brain-tissue. Reasons will be given later on for believing that the brain-substance may suffer violence from syphilis, but I shall first discuss the clinical aspects of specific disease of the membranes.

Disease of Brain Membranes.—Specific affections of the brain membranes very often declare themselves with great suddenness. The records of the disease present case after case in which an apoplectic attack, a convulsive paroxysm, a violent mania, or a paralytic stroke, has been the first detected evidence of syphilitic cerebral disease. On the other hand, in many instances the symptoms come on slowly and successively. Proper treatment, instituted at an early stage, is usually successful, so that a careful study of these prodromes is most important. They are generally such as denote cerebral disturbance; and, although they should excite suspicion, are not diagnostic, except as occurring in connection with a specific history, or under suspicious circumstances.

Headache, slight failure of memory, unwonted slowness of speech, general lassitude, and especially lack of willingness to mental exertion, sleeplessness or excessive somnolence, attacks of momentary giddiness, vertiginous feelings when straining at stool, yelling, or in any way disturbing the cerebral circulation, alteration of disposition—any of these, and *à fortiori*, several of them, occurring in a syphilitic subject, should be the immediate signal of alarm, and lead to the examination of the optic disks, for in some cases the eye-ground will be found altered even during the prodromic stage. Of course, if choked disk be found, the diagnosis becomes practically fixed; but the absence of choked disk is no proof that the patient is not suffering from cerebral syphilis. In regard to the individual prodromic symptoms, my own experience does not lend especial importance to any one of them; although, perhaps, headache is most common. There is one symptom which may occur during the prodromic stage of cerebral syphilis, but is more frequent at a later stage; a symptom which is not absolutely characteristic of the disease, but which, when it occurs in a person who is not hysterical, should give rise to the strongest suspicion. I refer to the occurrence of repeated, partial, passing palsies. A momentary weakness of one arm, a slight drawing of the face disappearing in a few hours, a temporary dragging of the toe, a partial aphasia which appears and disappears, a squint which to-morrow leaves

no trace, may be due to a non-specific brain tumor, to miliary cerebral aneurisms, or to some other non-specific affection: but in the great majority of cases where such phenomena occur repeatedly, the patient is suffering from syphilis or hysteria.

The first type or variety of the fully-formed syphilitic meningeal disease to which attention is here directed, is that of an *acute meningitis*. I am much inclined to doubt whether an acute syphilitic meningitis can ever develop as a primary lesion—whether it must not always be preceded by a chronic meningitis or by the formation of a gummatous tumor; but it is very certain that acute meningitis may develop, when there have been no apparent symptoms, and may, therefore, seem to be abrupt in its onset. Some years ago I saw, in consultation, a man who, in the midst of apparent health, was attacked by violent meningeal convulsions, with distinct evidences of acute meningitis. He was apparently saved from death by very heroic venesection, but after his return to consciousness developed very rapidly a partial hemiplegia, showing that a latent gumma had probably preceded the acute attack. On the other hand, an acute attack is liable at any time to supervene upon a chronic syphilitic meningitis. At the University Hospital Dispensary I once diagnosed chronic cerebral syphilis in a patient who the next day was seized with violent delirium, with convulsions and typical evidences of acute meningitis, and died four or five days afterwards. At the autopsy an acute meningitis was found to have been engrafted on a chronic specific lesion of a similar character. In the case reported by Dr. Gamel (*Tumeurs Gommeuses du Cerveau*, Inaug. Diss., Montpellier, 1875), in which intense headache, fever, and delirium, came on abruptly in an old syphilitic subject, and ended in general palsy and death, the symptoms were found to depend upon an acute meningitis, secondary to a large gumma.

In this connection may well be cited the observation of Dr. Molinier (*Revue Méd. de Toulouse*, xiv., 1880, 341), in which violent delirium, convulsions, and coma occurred suddenly. A very curious case is reported by Dr. D. A. Zambaco (*Des Affections Nerveuses Syphilitiques*, Paris, 1862, p. 485), in which attacks simulating those of acute meningitis appear to have been produced in a man with a cerebral gummatous tumor by a malarial complication. In such a case the diagnosis of a malarial paroxysm could only be made by the presence of the cold stage, the transient nature of the attack, its going off with a sweat, its periodical recurrence, and the therapeutic effect on it of quinine.

(To be continued.)

—Every one, rich and poor, takes a dip once a day in a caldron of hot water in Japan. The rich bathe before dinner and at night. The whole household dip in the same water. Precedence is given to visitors, then the elders, followed by the young people according to age, and then the servants. On getting out of the caldron each bathers gargles mouth and throat with cold aromatized water. They then fan each other until they are all dry.

EDITORIAL DEPARTMENT.

PERISCOPE.

Symptoms, Diagnosis, Prognosis, and Treatment of Typhlitis and Perityphlitis.

We extract the following from a paper by Dr. Leonard Wheeler in the *Boston Med. and Surg. Jour.*, May 1, 1884:

Symptoms.—An attack of typhlitis is more common in young males. It is usually abrupt, though often preceded by an irregularity of the bowels. At the time of the attack the bowels are usually constipated. Pain and tenderness are complained of in the right inguinal region, there is slight fever and probably vomiting, and the attack may pass off with no greater trouble than this. Such cases are considered common, and are often repeated in the same individual. I have never come across one, however, or if I have, have not recognized it. The attack may be something more severe than this, a tumor be demonstrable, the right leg drawn up, and the decubitus on the right side in order to diminish pressure on the diseased part. The great majority of such cases even recover without the formation of abscess or development of peritonitis, after a duration of from three or four to ten or twelve days, though an induration may remain for months.

Perityphlitis by no means necessarily implies abscess. The symptoms of the most formidable cases are similar to the above, except in degree, until perforation occurs or an abscess forms. A perforation into the peritoneal cavity makes itself very promptly known by the symptoms of acute general peritonitis. A perforation into the post-cæcal cellular tissue is not so manifest, nor is it easy to know when suppuration begins.

Diagnosis.—The number of diseases with which typhlitis and perityphlitis may be confused is large, but in most cases it only seems necessary to have the disease in mind in order to discover it. Mr. Maunder, of London, was called to tap an ovarian cyst, and found a cæcal abscess. Dr. For-dyce Barker narrates two cases, both seen by eminent counsel. The first patient was the wife of a physician, who proved to have a pelvic hæmatocele, although the diagnosis had been perforation of the appendix. The second was daughter of a physician, who proved to have a perforation of the appendix when the diagnosis had been pelvic hæmatocele.

Prognosis.—The prognosis in typhlitis in which no perforation occurs is good. The patients almost invariably recover. When there is a perityphlitis not suppurating, the danger is from recurrences, in which suppuration may take place. Dr. Wm. Pepper has a paper in the *Transactions of the Pennsylvania Medical Society* for 1882, in which he lays particular stress upon this liability to recurrence, and gives one case of twelve relapses. If the disease goes on to perforation, then the result depends in great measure upon the course taken by the pus and the surgical means employed. A perforation through any part covered by peritoneum, including thus nearly all perforations of the appendix, is a desperately

fatal accident. It is possible that adhesions precede the perforation, so that an opening is made directly or through the medium of an intraperitoneal abscess into one of the hollow viscera or through the abdominal wall. If a perityphlitic abscess forms, the most favorable course for the pus is through the cæcum or rectum. Perforation through the abdominal wall is not so favorable. Of twenty-eight cases collected by Dr. Bull, of New York, eleven were fatal.

Treatment.—In non-perforative cases, if there is much pain and tenderness, opium is proper until there is less, then small doses of saline laxative guarded by a small opiate, for it is desirable to relieve the cæcum of contents, both for the sake of diagnosis (to exclude impaction) and to relieve the patient of pain caused by the distended gut. At the same time externally a poultice, ice, or counter-irritation, may be used. Calomel is used by English practitioners generally, and is now and then mentioned by Americans. If an abscess is formed, it is to be evacuated immediately, and if there is a reasonable belief that pus is present, although no fluctuation is found, the surgeon is justified in or is required to test the belief by aspiration or incision. Upon the point of the diagnosis of pus, Dr. Sands writes: "Rigor, sweating, high temperature, acceleration of pulse, abdominal pain and tympanitis, and an increasing extent combined with diminishing firmness of the abdominal tumor, are the chief signs which indicate the formation of pus. But none of these signs is invariably present, and it would be a difficult matter to say which one of them is the most important. But although in the early stages of the disease it may be impossible to discriminate between the cases that are going to terminate by resolution, and those that are to end in suppuration, the latter may usually be distinguished toward the close of the second week by the general unfavorable condition of the patient, who seems to be growing worse instead of better; whereas when resolution is about to take place, the later course of the disease is comparatively mild and favorable." The smallest aspirator needle may be freely used to decide the diagnosis. The operation is done by making an incision parallel with Poupart's ligament through the successive layers of the abdominal wall until the fascia transversalis is reached; the pus is then sought by the needle if fluctuation is not present, and the abscess then opened sufficiently to allow the entrance of a finger to explore the cavity for foreign bodies. Fæcal odor and the presence of bubbles of gas in the abscess do not prove the existence of a perforation of the intestine, though making it very probable. It is well to be aware that a perityphlitic abscess may be quite behind the colon, and extending far upward toward the liver. In such case it would have to be approached from the side. Dr. Noyes, of Providence, has tabulated one hundred cases of this operation. The mortality was fifteen per cent. In Dr. Bull's sixty-seven cases of abscess tabulated in 1872, before the operation came much into use, the mortality was forty-seven per cent.

In cases of perforation into the peritoneal cavity, it has been proposed to make an abdominal section, clean out the cavity, and stitch the opening to the abdominal wound. But the difficulty of diagnosis is too great to allow of spending much hope upon this idea.

On Certain Forms of Intestinal Obstruction that may Follow after Hernia.

A paper on this subject was read by Mr. F. Treves, before the Harveian Society of London, March 20, 1884.

Although after complete reduction of a strangulated hernia, and after recovery from the operation, as a rule, no further intestinal troubles may be expected, apart from such as depend upon fresh accidents to the rupture, certain forms of intestinal obstruction might follow after such reduction.

1. Stricture of the intestine due to cicatrization after ulceration or sloughing of the mucous membrane, or to a form of contracting peritonitis. From the collected cases it would appear that neither the seat of the hernia, nor the duration of the strangulation, nor the nature of the operation, have certain or definite concerns in the production of these strictures.

2. Obstruction due to adhesions. The herniated loop may become adherent to the parietal peritoneum, and cause occlusion by "kinking," or the adhesions may lead to "bands" that may be the means of producing obstruction; omental bands are also common after certain herniæ.

3. Obstruction by the formation in the bowel of a rigid loop. Several examples of this form of obstruction were given, together with examples of a fistula bimuscosa consequent upon injuries received by the strangulated bowel.

Mr. Gant took a different view from the author of the paper, with regard to the origin of stricture of the intestine and looped constriction, as forms of intestinal obstruction resulting from hernia. They were not subsequent conditions, but commenced from the time of operation, owing to the indentation often left upon the bowel at the seat of stricture, when the strangulated portions had been inadvertently returned into the abdomen in that condition. Hence the great importance of the rule he always observed, that of gently drawing down the gut, and of effacing the indentation by gentle manipulation before returning the part into the abdomen. The same might occur after the reduction of enterocoele without operation, and it might be advisable to resort to operation to discover and release any such constriction, even when reduction could be effected by taxis, provided that the duration of the strangulation rendered it probable that plastic constriction might have supervened.

Mr. Cowell criticised the statement that the duration of the hernia had no definite influence upon the liability to subsequent obstructions. Some of the forms of obstruction, and especially those produced by bands of adhesion, were much more likely to be found in old herniæ. In many patients several different portions of intestine in succession found their way into the hernial sac, and were liable to be pressed on, each of them in turn becoming the seat of some inflammatory change and exudation.

Hour-glass Contraction of the Uterus.

Dr. J. J. Gorham thus writes in the *Brit. Med. Jour.*, March 22, 1884:

I believe a useful chapter could be added to modern works of midwifery on the use and abuse of the binder, enumerating under the latter category the liability of inducing hour-glass contraction by its improper application. The contributions in the *Journals* of February 16 and March 8 (pp. 312, 456), by Messrs. James and Chappell, serve to confirm a view I have always held as to one of the causes, perhaps the most frequent cause, of hour-glass contraction. My experience differs from Mr. Chappell's as to the time when the binder produces its dangerous action. I believe this danger is almost always caused by the irregular pressure of an improperly-applied binder on the temporarily inert uterus after the birth of the child, and before the separation of the placenta, and that its production is often purely mechanical (i. e., by constriction), instead of being induced by irregular muscular action, as is usually supposed. This theory would scarcely meet Mr. James's case, unless the binder in that instance had been readjusted on the completion of the second stage. The following brief record of a case which I attended comparatively recently will, I hope, clearly illustrate my meaning:

Mrs. K., who had previously nine children, all with one exception natural labors, sent for me on her tenth confinement. On my arrival at the house, the os and passages were fully dilated, the head presenting at the brim; the membranes had broken an hour before my arrival. After waiting a short time, and seeing that the head had not advanced, I put on the long forceps and delivered, whereupon a second child was found in the uterus. This was turned and delivered, and, in the absence of anything better at hand, I extemporized a binder out of a small shawl, and, after having given a full dose of ergot, I waited for the completion of the third stage. After half an hour, the insertion of the cord into the placenta not being reached with the finger, I introduced my right hand with some difficulty through the os, and, after examination, I found complete hour-glass contraction, with the greater portion of the placenta imprisoned in the upper cavity. I had some difficulty in passing my index and middle fingers through the constriction, so tightly did it embrace the placenta; and, on manipulating with the left hand outside the abdomen, the cause of the mischief became at once apparent. The binder, instead of forming a firm support for the fundus of the uterus, had collapsed, and formed a constricting cord round the abdomen near the umbilicus. On removal of the binder, all difficulty shortly ceased, the placenta was removed *en masse*, and the woman made a rapid recovery.

—Two cases of chronic mercurial poisoning are mentioned by Neukirch (*Edinburgh Medical Journal*, March, 1884), interesting enough owing to the cause, viz., the impregnation of the air of patients' sleeping apartments with mercurial vapor from imperfectly amalgamed looking-glasses. He supposes that such cases, in obscure forms, may be frequent enough, as one of his had suffered for four years before the cause was discovered.

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THE MINERAL WATERS OF CRESSON.

Dr. Carl Seiler, at the recent meeting of the American Medical Association, held at Washington, D. C., read a very interesting paper on the medicinal value of the mineral springs at Cresson, Pennsylvania. During his remarks he said that there are at Cresson three springs:

1. One a very strong iron spring, which, according to the analysis made by the Pennsylvania State Survey, ranks with the best so-called steel springs of Europe.

2. A ferruginous alum spring and a weak magnesia spring. These waters he used on a number of patients suffering from chronic catarrhal inflammation of the upper air-passages in the form of sprays applied locally to the diseased mucous membrane and the iron and magnesia waters internally, with proper regulation of the diet of the patients.

Thus he found that the ferric alum water had a decided tonic and stimulating effect in those cases of atrophic nasal catarrh which were complicated with pharyngitis sicca and chronic laryngitis, and that the beneficial effect of the local application was very soon apparent to the patient. In these cases selected for trial, no other treatment was used so that there should be no error possible in determining the therapeutic value of the application.

The iron water he found to have no very decided effect upon these cases, but to be of great value in cases of follicular pharyngitis and in the milder forms of hypertrophic nasal catarrh, as well as in cases of ordinary simple chronic laryngitis and bronchitis.

The magnesia water locally applied gave no results whatever, and he very soon desisted in using it for topical applications, but found it a valuable adjuvant in the treatment of patients suffering from lythæmic inflammations of the mucous membrane of the upper air passages. In these cases the patient was directed to drink the water freely, and its slightly diuretic effect soon became apparent.

The iron spring also is somewhat diuretic in its

action, but is chiefly valuable as a tonic, particularly in cases with feeble digestion.

Artificially prepared solutions of iron and ferric alum, which he used in a number of cases similar to those which were treated with the natural waters, did not have the same effect; and this fact strengthened his belief that it seems impossible to manufacture an artificial mineral water in the laboratory of the chemist, which is equal in its value to that produced in nature's laboratory.

Almost all the European authors on diseases of the lungs and upper air passages lay great stress upon the value of the natural mineral waters in the treatment of these disorders, and advise their patients to go to one or the other of the many watering places on the continent. In America, on the other hand, although we have mineral springs of equal, and even greater therapeutic value than are found in Europe, yet the medical profession at large does not seem to recognize the fact, and they are little patronized, with the exception of a few, where, however, the waters form the least attraction.

This may, perhaps, find an explanation in the fact that in this country, everything being free, the patients at these watering-places are left to their own choice as to the quality and quantity of the water they are to drink, and are not in the least restricted as to their diet, which, as a rule, is either altogether insufficient in quality or sumptuous beyond reason. In Europe, however, the effects of the different mineral springs are well known to every educated physician, and when he sends a case to a watering place, it is not a random patient which, perhaps, he is anxious to get rid of for a time, but he selects that mineral spring which is most suitable for the disease from which the patient is suffering. At the springs there is also a physician appointed permanently by the company or State owning the ground, who has made a study of the therapeutic action of the mineral waters, and who directs every patient as to which of the waters, if there be more than one spring at the place, he is to drink or use, how much, and in what form, whether internally, by local application, or in the form of baths, and

finally, gives careful directions as to diet and exercise compatible with the use of the mineral springs.

We cannot expect that change of air and the indiscriminate use of a mineral spring alone should produce those marvelous effects which we so often hear about as having been produced by this or that German spring, unless we combine hygienic measures with our therapeutic agents.

The mineral springs of Cresson, viewed from this standpoint, will, he has no doubt, soon be recognized as extremely valuable in the treatment of all catarrhal affections of the mucous membranes, which is enhanced by their situation and surroundings. They are located near the summit of the Alleghanies, at an elevation of 2300 feet above the level of the sea, and within a few miles of the celebrated Horseshoe Curve of the Pennsylvania Railroad, thus affording a moderately high altitude with a moderately dry climate, one that is eminently suited for catarrhal diseases. The hotel accommodations are excellent, and the place is free from many of the objectionable features of other more fashionable watering-places, such as drinking-saloons, gambling-hells, race-courses and the like, which aside from the bad moral effect, must necessarily materially interfere with the needful rest, free from excitement, so necessary in the treatment of most chronic diseases.

THE PROPRIETY OF ARTIFICIAL FECUNDATION.

The French journals have lately been discussing the propriety of the operation for artificial fecundation, apropos of a case which occurred at Bordeaux last year, and which we mentioned at the time.

One side maintains that the operation might lead to injurious social results; that the physician oversteps the bounds of his art in suggesting it; and that it is in violation of the sanctity of marriage.

The advocates of the procedure argue that it is a perfectly ethical undertaking; that it is no more threatening to social morality or the privacies of marriage than any other treatment for sterility; that it offers a means for removing one

of the most certain causes of unhappiness in married life; and that if properly carried out there is no more violation of proprieties than in making an ordinary examination with a speculum. The procedure of Prof. Pajot is recommended. He appoints an hour for coitus to take place, calls about an hour later, introduces a syringe in which he takes up a little of the seminal fluid, and throws it well into the uterine cavity. The result is frequently successful.

NOTES AND COMMENTS.

Obstinate Hæmaturia.

This trouble is oftentimes so rebellious to treatment that the case which a correspondent of the *Lancet* (April 5, 1884,) records is well worthy of note:

About two years ago J. S—, sixteen years of age, received at school a blow on the right lumbar region, which caused pain and swelling for a few weeks, when the urine became loaded with blood. He was treated by neighboring surgeons with various remedies, without any perceptible decrease of the bleeding. As the poor boy became terribly blanched and weakened, his father brought him to the Royal Infirmary at Liverpool, where he stayed for about two months, which appeared to have no effect, as the bleeding, which always took place when resting for a while in bed, was as bad as ever, but the quantities lost were not so large. He was discharged, and told to continue the infusion of ergot and keep quiet. The bleeding continuing and death being imminent, he again sought admission to the Royal Infirmary, and was admitted. He remained a month; rest and quietude appeared to improve him a little, as all medicines were discontinued. The physicians diagnosed calculus, and suggested an operation, to which the boy and his parents objected. Upon his return home I saw him, and, having heard nothing of his previous history beyond the fact of his ailing so long, ordered him to bed and prescribed sulphuric acid and sulphate of iron in quassia infusion, the specific gravity of the urine then being 1032, and the color a dark blackish-brown, with a layer of blood after standing a few hours. Heat and nitric acid converted the recently-made urine into a solid mass of a black bloody color, which state of things continued for a month. I now prescribed ergot and muriated iron, with exactly the same result. I began gal-

lic acid in ten-grain doses, and continued for a couple of weeks. Finding all remedies equally useless, I asked the advice of Dr. Lionel Beale, which he, in the most handsome manner, gave, and I publicly thank him for so doing. He said: "Give gallic acid in any dose the stomach will bear, and continue as you have been doing." I began with thirty grains every four hours, and afterwards every three hours, with most decided benefit, the stomach retaining those large doses. One month after this latter treatment, the urine presented the following characters: Specific gravity, 1010; color, pale straw; no blood or albumen with heat and nitric acid. The boy has gained twenty-six pounds, and is going about as before the accident, regaining health and color daily. He has ceased taking medicine for the last ten days, without any bad effects. What I wish to point out is the difference of the doses, and the impression which the large doses of gallic acid seemed to have made on the system.

Causation of Sex.

A careful statistical study of the causation of sex has been completed by Dr. Schumann. His studies are based on the census of Norway and Alsace, the only ones in Europe which offered the necessary facts. His most important deduction is that both relatively and absolutely, the determination of sex is related to the vigor of the parent. Each sex has a tendency to reproduce itself, and the sexually stronger of the pair exerts the most influence. Males above 35 or below 25, beget more males than females; so also males living in cities are more apt to have female children than those in the country; facts which our author attributes to the greater debility of the fathers.

We do not pretend to dispute these facts, but the interpretation offered is not the only, perhaps not the most plausible one that could be made.

A New Test for Peptones.

In the suit of Dr. Carl L. Jensen against Keasby & Mattison, as a test case against the alleged infringers or imitators of his pepsin products, Dr. Jensen brought to light that the well-known test for bile (Pettenkofer's) is also a test for peptones in general. This may lead to some important suggestions as to the origin of the bile, and whether it is not one of the earliest products of the digestive process. The presence of the bilic acids in peptic ferments would seem to intimate this.

NEWS AND MISCELLANY.

American Surgical Association.

At the fifth annual session, held in Washington, April 30, May 1, 2, and 3, 1884, the following papers were read:

"An Experimental Study of Anæsthesia," by Dr. B. A. Watson, of Jersey City. "Some of the Dangers and Disadvantages of Anæsthetics," by Dr. David W. Cheever, of Boston. "Wounds of the Intestines," by Prof. S. D. Gross. "Ligation of Common Femoral Artery," by Dr. L. McLane Tiffany, of Baltimore. "Traumatic Cephalhydrocele," by Dr. P. S. Conner, of Cincinnati. "Surgical Interference in Cerebral Abscess," by Dr. C. B. Nancrede, of Philadelphia. "Surgery of the Hand, Especially as Applied to Railroad Injuries," by Dr. Joseph W. Thompson, of Paducah, Ky. "Clinical Observations on the Treatment of Some Railroad Injuries of the Extremities," by Dr. James McCann, of Pittsburgh. "Philosophy of Manipulation in the Reduction of Hip and Shoulder Dislocations," by Dr. Moses Gunn, of Chicago. "Tracheotomy in Croup," by Dr. George W. Gay, of Boston. "The Multiple Wedge Principle in the Treatment of Organic Strictures of the Urethra," by Dr. John S. Coleman, of Augusta, Ga. "Trifacial Neuralgia," by Dr. J. Ewing Mears, of Philadelphia. "Trepanning for Insanity," by Dr. William A. Byrd, of Quincy. "Trephining for Epilepsy," by Dr. William T. Briggs. "Extirpation of the Tongue in Cancerous Affections," by Dr. Basil Norris, of Washington. "The Treatment of Indolent Suppurating Bubo by Extirpation," with cases, by T. F. Prewitt, M. D., St. Louis, Mo. "Artificial Respiration in the Sitting Position," by Henry F. Campbell, A. M., M. D., Augusta, Ga. "Clinical Notes," by Donald Maclean, M. D., Detroit, Mich. "Supra-Pubic Lithotomy," by W. S. Tremaine, M. D., U. S. A., Buffalo, N. Y. "Some Points on the Pathology and Surgery of the Prostate," by J. W. S. Gouley, M. D., New York city. "The Localization of Perinephric Inflammation by means of Chemico-Anatomical Study," by John B. Roberts, M. D., Philadelphia, Pa. "Unsettled Questions in Relation to Injuries of the Head," by David Prince, M. D., Jacksonville, Ill. "Anæsthesia, and Plaster of Paris Bandage in the Treatment of Sciatic Neuralgia," by John A. Cominger, M. D., Indianapolis, Ind. "Practical View of Neoplasm," by E. H. Gregory, M. D., St. Louis, Missouri.

The officers for the ensuing year are as follows:

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Washington was selected as the place of meeting, April, 1885.

American Medical Association.

At the thirty fifth annual meeting, held in Washington, May 6, 7, 8, and 9, the following papers were read:

"Address in the Section of Practice of Medicine," by Dr. John V. Shoemaker, of Philadelphia. "Notes of 231 Cases of the Operation for Laceration of the Cervix Uteri without a Single Death," by Dr. T. A. Reamy, of Cincinnati. "Address on State Medicine," by Dr. Deering J. Roberts. "Usefulness of Special Knowledge and Desirability of Using Well defined Special Medical Truths by General Practitioners," by Dr. J. J. Chisholm. "Infectious and Contagious Diseases of Children," by Dr. William Lee, of Baltimore. "Address in the Section of Oral and Dental Surgery," by Dr. T. W. Brophy, of Illinois. "Simulation of Pathognomonic Signs and Symptoms," by Dr. Edward G. Janeway, of New York. "The Clinical Study of the Heart Sounds," by Dr. Austin Flint, sr., of New York. "Dermatitis Herpetiformis," by Dr. Louis A. Duhring, of Philadelphia. "The Etiology of Pericarditis," by Dr. James T. Whittaker, of Cincinnati. "The Production of Poisons by Micro-organisms," by Dr. Black, of Illinois. "The New Official Chlorate," by Dr. Traill Green, of Easton, Pa. "A Periodically Painful Affection, Believed to be Located in the Liver, its Capsule, or Both, or Possibly a True Irritation of the Capsule of Glisson," by Dr. R. Harvey Reed, of Mansfield, Ohio. "Epilepsy," by Dr. William Pepper, of Philadelphia. "The Diagnosis of Tumors of the Anterior Mediastinum," by Dr. Jas. C. Wilson, of Philadelphia. "The Pathology of Myocarditis," by Dr. William H. Welch, of New York. "Irregular Apoplectic Attacks from Other Causes than Hemorrhage or Embolism," by Dr. Caspar Griswold, of New York. "Occult Causes of Disease," by Dr. W. L. Schenck, of Kansas. "The Dietetic Treatment of Diabetes Mellitus," by Dr. A. Flint, jr., of New York. "Phthisis, its Successful Treatment," by Dr. J. P. Miller, of Buckhannon, W. Va. "Tuberculosis," by Dr. Henry F. Formad, of Philadelphia. "Retardation of the Pulse in Mitral Insufficiency," by Dr. A. T. Keyt, of Ohio. "Etiology of Enteric Fever," by S. K. Crawford, M. D., Illinois. "New Theory and Instrument of Diagnosis," by Dr. L. G. Ayres, of Pa. "The Advantages of Massage in Rheumatic Gout," by Dr. Douglass Graham, of Massachusetts. "The Specific Treatment of Diphtheria and Croup," by Dr. George A. Linn, of Monongahela, Pa. "Muscular Hypertrophy of the Stomach," by Dr. Alexander Marcy, Jr., of Riverton, N. J. "Treatment of Typhoid Fever," by Dr. S. K. Jackson, of Norfolk, Va. "Review of the Germ Theory of Disease," by Dr. Henry O. Marcy, of Boston. "Treatment of Compound Fractures," by Dr. Frederick S. Dennis, of New York. "On Railroad Injuries of the Extremities of the Human Body, with Observations on the Site of Amputation and Subsequent Treatment of the Stump," by Dr. T. R. Varick, of New Jersey. "Calculus Fractured Spontaneously in the Bladder," by Dr. J. W. S. Gouley, of New York. "Amputation at the Hip-joint," by Dr. C. A. Wheaton, of Minnesota. "An Earthy Calculus in the Substance of the Liver," by Dr. William A. Byrd, of Illinois. "Branchial Cysts of the Neck,"

by Dr. W. Senn. "The Treatment of Hydrophobia, Historically and Practically Considered," by Dr. C. W. Dulles, of Philadelphia. "One Hundred Experiments upon Abdominal Cavities of Animals, the Injuries being Caused by Gun-shots," by Dr. C. D. Parks, of Chicago. "Chronic Serious Synovitis of the Knee, with Enormous Communicating Popliteal Bursa Extending to Tendo Achilles," by Dr. T. F. Prewitt, of Missouri. "Treatment of Obstinate Cases of Club-foot," by Dr. E. H. Bradford, of Mass. "Entrance of Air into the Veins a Secondary Cause of Death," by Dr. G. L. Porter, of Conn. "Desperate Surgery among Women," by Dr. R. S. Sutton, of Pittsburgh. "Surgical Operations for Cancer of the Uterus," by Dr. W. H. Byford, of Chicago. "Trachelorraphy, by Dr. Joseph Tabor Johnson, of Washington. "Puerperal Septicæmia," by Dr. Theophilus Parvin, of Philadelphia. "The Relations of Ovulation and Menstruation," by Dr. A. Reeves Jackson, of Illinois. "The Management of Protracted Labor," by Dr. W. H. Taylor, of Ohio. "On the Use of Chloroform in Labor," by Dr. J. Herbert Claiborne, of Virginia. "On the Management and Rectification in Difficult Cases of Occipito-Posterior Presentations," by Dr. I. E. Taylor, of New York. "A Paper written by the late Dr. Samuel D. Gross, entitled, "Causes and Prevention of Laceration of the Female Sexual Organs," by Dr. Busey. "A Thousand Cases of Labor in Private Practice, and the Deductions to be Made from the Same," by Dr. W. M. Findley, of Pennsylvania. "Sudden Death in Labor and Child-bed," by Dr. Wm. T. Lusk, of New York. "Malformation of the Female Sexual Organs," by Dr. Brown, of Baltimore. "The Significance of Bloody Discharges from the Bowels in Children," by Dr. Frank Woodbury, of Philadelphia. "Congenital Encephalocele," by Dr. John H. Duncan, of Kansas City. "Diphtheria Based Upon Analysis of 120 Cases, with a Mortality of 7," by Dr. J. W. Brown, of New York. "Septic Jaundice in Childhood," by Dr. M. P. Hatfield. "The Feeding of School Children," by Dr. Louis Atlee, of Philadelphia. "Enlarged Tonsils, and How They Should be Treated," by Dr. Dudley S. Reynolds, of Kentucky. "Incontinence of Urine in Children," by Dr. Samuel S. Adams, of Washington. "Practical Suggestions on the Treatment of the Malignant Forms of Scarlet Fever," by Dr. Bedford Brown, of Virginia. "Neoplasms of Lachrymal Glands," by Dr. P. D. Keyser, of Philadelphia. "Diagnosis in Ophthalmology," by Dr. Williams. "Sympathetic Neuro-retinitis," by Dr. Risley, of Philadelphia. "Method of Treating Chronic Otitis Media," by Dr. H. H. Hart, of Ohio. "Irregular Astigmatism," by Dr. G. D. Theobald. "Influence of Climate on Treatment of Chronic Catarrh of Middle Ear," by Dr. J. J. Fulton. "Epistaxis," by Dr. W. Rankin, of Allegheny. "Diseases of the Ear in Locomotive Engineers," by Dr. L. Turnbull, of Philadelphia. "Rapid Operation on Ripening Cataract, or Artificial Ripening of Cataract," by Dr. C. S. Beele. "Operation for Removal of Nasopharyngeal Fibromata," by Dr. E. F. Ingals. "Chronic Acid Poisoning of Nares and Adjacent Cavities," by Dr. Mackenzie, of Baltimore. "Sarcoma of Pharynx and Soft Palate," by Dr. Bosworth. "Physical Causes of Asthma,"

by Dr. Cutter, of New York. "Caries of Teeth, and its Relations to the Germ Theory of Disease," by Dr. George V. Black, of Illinois. "Importance of, and Treatment for, assuring Healthy Dentine over Endangered Pulp," by Dr. Jacob L. Williams, of Massachusetts. "Sponge-grafting," by Dr. Edward C. Briggs. "The Removal of Stains from the Teeth Caused by Administration of Medicinal Agents, and the Bleaching of Pulpless Teeth," by Dr. S. W. Harlan, of Illinois. "Overdraft of Nervous or Vital Power as Affecting General Special Health," by Dr. Jacob L. Williams. "A Case of Vicarious Hemorrhage from the Gums associated with Pyorrhœa Alveolaris, the Result of Amenorrhœa," by Dr. A. W. Allport, of Ill.

If any of our readers are interested in any of these papers, they can be procured by addressing the authors.

Officers for ensuing year:

President—Henry F. Campbell, Georgia.

Vice-Presidents—J. S. Lynch, Maryland; S. D. Mercer, Nebraska; J. W. Parsons, New Hampshire; H. C. Ghent, Texas.

Treasurer—R. J. Dnnglison, Pennsylvania.

Librarian—C. H. Kleinschmidt, District of Columbia.

Chairman of Committee of Arrangements—S. D. Logan, New Orleans.

Assistant Secretary—W. H. Watkins, New Orleans.

Place of meeting, New Orleans, last Tuesday in April, 1885.

Pennsylvania State Medical Society.

The thirty-fifth annual session of this Society was commenced in Philadelphia, May 14.

At ten o'clock the session was called to order by the President, Henry H. Smith, of Philadelphia. He was supported by Drs. Schultz and Van Valzah, the Vice-Presidents. After a fervent prayer by Rev. Dr. John S. MacIntosh, invoking the blessing of the Almighty on the efforts of the association to alleviate the sufferings of humanity, the Secretary, Dr. W. B. Atkinson, read the register of the members.

Then Dr. John B. Roberts, Chairman of the Committee of Arrangements, delivered the address of welcome. He said:

"To you, Mr. President; to you, ladies and gentlemen, members and delegates of the Medical Society of the State of Pennsylvania; to you, its invited guests, I, on behalf of the Philadelphia County Medical Society, extend a cordial greeting. The Society last met in this city at the time we celebrated the one hundredth anniversary of the Declaration of Independence. I welcome, then, an eight years' absent guest. During these eight years, growth in members, growth in influence, growth in scientific knowledge, has given the Society added fame. This is amply shown in the programme prepared for the present occasion, which is full and varied—too full, indeed, do not the members rigidly observe the rule limiting the length of papers. That this wholesome law may not be disregarded, it looks upon us from the first page of the printed card of exercises; of this, an underscored copy has long since been sent to every speaker. Thus, early opportunity for condensing press and pruning-knife was given all.

The varied scientific dishes have been grouped to suit the palate of the surgeon, of the physician, of the specialist; to the end that no intellectual indigestion may follow undue intermingling.

"That your visit may be profitable and undisturbed by clouds of discontent, that your next absence may be brief, and your return joyous, is our most earnest wish. But, Mr. President, he is welcomed best whom words stay not upon the threshold. I bid you, then, 'Come in;' our hearts, our homes are yours."

Governor Pattison was introduced by President Smith, and he was greeted with loud applause. He said:

"The Commonwealth of Pennsylvania derives exceptional honor from the character and reputation of her medical profession. Its ranks are lustrous with great names, and its history with great achievements that have given her fame throughout the world. The State has undoubted prominence by reason of its great scientific progress and the achievement of her physicians and surgeons. And it should be remembered that it was here that the first system of medical study was formulated in this country, upon which was founded our venerable University. Philadelphia might be termed the Edessa of medical instruction, as the place of beginning and as the chief centre of the science to-day. Our colleges and schools and their professors have given us a great reputation throughout the world."

He made a graceful allusion to the death of Dr. S. D. Gross, and said that while we met now under a great shadow and sorrow, yet we have his fame and teachings left—he who had the honors of Oxford, Cambridge, and Edinburgh. The Governor congratulated the association on the steady progress made in the science of medicine, and bid the members God-speed in the great work of healing, and hoped they would continue to uphold the high standard of the profession. His remarks were greeted with general applause.

THE OFFICIAL PROGRAMME

of the meeting was read, and on motion of Dr. Atkinson the privileges of the floor were tendered to Dr. Rockwell, representative of the Ohio Medical Association, and he was invited to a seat by the President. Dr. J. C. Berry, of Japan, and other visitors, were welcomed to the convention.

Dr. Hudson, of Mifflin county, read an extended report of the proceedings of the American Medical Association at Washington recently. Reports of other State societies were then read, but possessed no points of special interest.

Dr. H. C. Genth, President of the Texas Medical Society, was invited to a place on the platform.

Reports of the Corresponding Secretary, of the Library Committee, Committee of Publication, County Medical Examiners, various County Medical Societies, Anti-Vivisection Society, and the Committee on the State Board of Health, were read.

ADMITTING LADY DELEGATES.

The secretary read the names of several lady physicians, who applied for admission; but, as they were not members of the County Medical Society, he did not let them in. Dr. J. L. Stew-

art, of Erie, objected to the admission of the ladies, but President Smith said they were physicians, and as such were entitled to sit with their brethren. He thought they could enter, take seats, and be heard, but he had no power to give them the right to vote.

This was followed by the presentation of a list of names of persons who were invited to take part in the proceedings, and become "members by invitation." All were ladies except Drs. Da Costa and Ruschenberger, and were as follows: Dr. Clara Marshall, Dr. Anna Broomall, Dr. Frances Emily White, Dr. Hannah T. Croasdale, Dr. Rachel L. Bodley, Dr. Ida E. Richardson, Dr. Emeline Dubois, Dr. Emma V. Boone.

Then followed the same courtesy to the members of the Philadelphia County Medical Society not delegates. The significant thing about this action is that the Philadelphia County Medical Society refused to admit these ladies to membership in their society, thus taking an opposite position to the medical societies of other counties, where ladies are admitted.

The question of publishing papers before they were prepared for publication by the proper committee was discussed with some spirit. It was stated that certain "advertising physicians" got a column or two published, while the papers prepared by other and more distinguished physicians, on more important topics, are dismissed with a line or two. Dr. Allis declared that this conduct was unprofessional, and ought to be checked.

The matter was finally referred to a special committee of five, which the President said he would appoint later.

STATE BOARD OF HEALTH.

Dr. Benjamin Lee reported that, as the Legislature was not in session, his committee could do nothing in regard to securing a State Health Bureau. The committee urged the necessity of agitating the subject generally, in order that this great boon and means of protection may be secured.

VIVISECTION.

Dr. S. Weir Mitchell read the report on the subject, and, as he had a bad cold, he asked that the delegates would come up front. There was a rush at once of ladies and gentlemen doctors. He recited the history of vivisection and the opposition to it in England. A large number of physicians thought no harm was done by experimenting on animals, and to stop it would check physiological research. The restrictive law passed by Parliament was very unpopular, and was doing much mischief there. It had checked the knowledge of snake poisons and their effects. He had sent to doctors in India for snake poisons to test here, but these were refused because of the law. Fortunately the proposition to abolish vivisection was now unpopular, and probably cannot be passed.

Dr. Mitchell alluded to the reported cruelties of vivisectionists on animals, and said they were ridiculous. There were probably a dozen experimentalists, and they did no great mischief to domestic pets in the attempt to advance science.

In New York the legislature had failed to pass

a restrictive law. It had been charged, here in Pennsylvania, that the work of vivisection was greatly overdone. We know that we have but a few medical schools, and it is only in them that the work is performed. A few over-kindly lawyers and ladies think that we should be restrained. Twenty-four hundred physicians in London, from all Christendom, have solemnly approved vivisection; and while they denounce anything like cruelty to animals, they think that vivisection may be practiced without shock to sensitive feelings.

The committee offered the same preamble and resolutions adopted recently by the American Medical Association at Washington, by a vote of 1,100 to 1, and that a lady whose name could not be ascertained. The chief resolution was opposed to restrictive action because experiments on animals are promotive of science, and so nearly harmless as to be unworthy of opposition. The report was adopted, and the committee was continued.

Reports of the Committees on Insanity and Lunacy, on Medicine and Surgery, the Diseases of Women and Children, Ophthalmology, Otology, Nervous Diseases, etc., were called, but only two were ready at present. A recess was taken for dinner.

On re-assembling at two o'clock the Secretary made several announcements as to entertainments.

"THE PRESENT OUTCOME OF SANITARY AGITATION IN LARGE CITIES OF THE UNITED STATES."

This was the title of the address on hygiene and state medicine, by Dr. Benjamin Lee. He said:

With all the inestimable blessings which flow from a republican form of government, blessings of which we, as a people, are too thoroughly convinced to have our faith in them easily shaken, he is no true patriot who shuts his eyes to the fact that there are also certain disadvantages not easily separable from it; certainly not as it exists among us at the present day. Under a monarchy, the chief executive usually calls to his aid in solving problems which affect the ordinary conditions of life, trade, and manufacture, the highest scientific ability which the country affords. Experience has demonstrated, in our own case at least, that under a republican form of government, on the contrary, pure science is not held in high esteem by the governing bodies. They are unwilling to look beyond practical advantages, and those mainly as embodied in dollars and cents, or their equivalents. They are quite willing to use the telegraph and the telephone. They would have turned away with an impatient shrug of the shoulders from a Franklin amusing himself with his kite, or a Galvani with his jumping frog's legs: and as for voting the public money for carrying on such child's play, not they! Such being the case, what remedy shall enlightened citizens who wish well to their country employ, to check the evil and prevent the Great Republic from falling behind all other civilized countries in the arts of life? To how great an extent we had fallen behind in many of them, the Centennial Exhibition was a wonderful witness and revealer. Now, as the brave and

sententious Captain Cuttle was wont to remark, "The bearin' o' these observations in in the application of 'em." In no department of governmental supervision do the United States of America make so poor a showing, as compared with the "effete monarchies of Europe," as in that of the care of the public health.

Within limited areas and in small communities, much may be accomplished by private effort, and this fact hygienists have not been slow to appreciate. But ago-between was needed to interpret their teachings to the masses, and impress upon them their importance. This agency has developed itself in voluntary sanitary associations. Modeled upon one started in the ancient and filthy city of Edinburgh, the first in this country was started in Newport, Rhode Island. This was followed by a second in Lynn, Mass., and a third in Orange, N. J., then in rapid succession by others in other cities and villages, until now there are not less than a hundred and seventy in active and beneficent operation throughout the country, that of Brooklyn, L. I., being the largest and most important. The objects of these associations are, first, self-protective, by indicating, as far as may be, sanitary defects and dangers in the homes of their members, and of neighbors of their members, suggesting remedies for such defects, and urging their application; and secondly, educational, (a) in the most practical way by actual demonstration of the necessity for, and the benefits of, sanitary science, as above stated, and (b) by the dissemination of popular tracts expressed in simple, intelligible, and forcible language, giving both general information and practical hints in detail as to the sanitation of the dwelling. Such an association is in reality a mutual insurance company for the preservation of private and public health. It is not intended as a substitute for municipal inspection, and will not conflict with the public health authorities, where such exist, but will supplement their action.

But the citizen who has had the sanitary defects of his dwelling pointed out to him—defects which hourly threaten the lives and health of his loved ones—finds himself, like Christian in the Slough of Despond, with an awakened sanitary conscience, an enlightened perception of his danger, but with no hand stretched out to help him.

And just here is to-day the encouraging feature to the sanitarian. There is no better test of the success of any movement of reform, than that capitalists are willing to embark their means in carrying it on. With a view to filling the hiatus which I have indicated as existing in our large cities, between the appreciation of the evil and the application of the remedy, stock companies have been formed. These companies engage, with more or less modification of course, determined by the special character of each, to make inspections, both special and periodical, of dwellings and buildings confided to their care, as far as their sanitary condition is concerned; to indicate defects, if any exist, and to remedy those defects by introducing sanitary appliances of the best material, most approved pattern, and most scientific construction, under the supervision of thoroughly qualified experts; to furnish plans and specifications for the sanitary system of new buildings and of grounds,

and to take complete charge from the outset of the introduction of such systems.

Probably the earliest of these companies in the field was the "Durham House Drainage Company, of New York." Its specialty consists in manufacturing its own materials, of scientific design and correct mechanical construction, but it undertakes only the main drainage system. Its responsibility ceases where that of the plumber begins. The "National Anti-Sewer-Gas Company," organized in this city, but having already a branch in New York under the name of the "Manhattan Anti-Sewer-Gas Company," aims to prevent the introduction of sewer-gas into houses by offering a perfectly constructed water-seal for closets, and by a system of thorough inspection and disinfection of the drainage.

The "Sanitary Protective and Mercury Seal Company," of this city, proposes to take charge of both the construction and the inspection of buildings, so far as their sanitary arrangements are concerned, giving the preference to its own seals and closets, the merit of which consists in the fact that the ingress of foul emanations from sewers, cess-pools, or drains into the dwellings is prevented by the interposition of mercury, through or by which they can by no possibility force their way. This company has connected with it an "advisory council," consisting of a hygienic consultant, a medical consultant, and a sanitary engineer, whose duty it is to pass upon all reports of inspectors, plans of drainage and specifications of construction, and without whose approval no plan can be carried into effect by the employees of the company.

The "Philadelphia Drainage and Construction Company" also offers its patrons the advantages of frequent inspections by competent officers, but especially invites opportunities for designing and executing the systems of drainage of country seats, villages, seaside hotels, and so forth.

I do not say that the evil of which I have been speaking is an unmixed one. Possibly the work of inspection is more carefully done under the auspices of private companies than it would be by government inspectors. Possibly the stimulus of competition may lead private corporations to use better materials, and execute more satisfactory, and plan more scientific work than would be insisted on by routine officials; but the fact remains, that it is a public duty performed by private citizens, in consequence of the failure of our legislative bodies, state and municipal, to arise to an intelligent appreciation of their responsibilities as conservators of the common weal.

Dr. E. A. Wood, of Pittsburgh, then read a paper in which he discussed the question of, and strongly advocated the establishment of a State Board of Health in Pennsylvania.

Dr. Henry Leffmann followed with a paper on

PROPER MEDICAL EDUCATION,

claiming that the present system of medical education is not the result of efforts to meet the needs of the community, but is largely an irregular development. The reforms which medical colleges have adopted, have been mostly unwilling concessions to public sentiment. The seven fold division of branches has nothing to recommend it but antiquity; it is not a convenient nor a scientific division

of the subject. Under the arrangement, some of the departments of the college course are overcrowded; others have not sufficient matter to occupy the time assigned. Departments like hygiene, mental and nervous diseases, and medical jurisprudence, have developed so of late years that they might properly be taught by separate chairs, and not made merely subsidiary to other chairs, or limited to spring or fall lectureships. The extension and success of post-graduate schools indicate the direction in which the improvement of the curriculum should be made.

Higher specialization is the necessity of the time. The success which has been attained by dentistry shows that other departments, such as otology, laryngology, etc., might with advantage be pursued independently. There would be no reasonable objection to establishing the degrees of Doctor of Otology, Ophthalmology, and so on, commensurate with the degree of Doctor of Dental Surgery.

A preliminary training for the student before entering on the study of medicine is so obviously necessary that it need not be argued.

The final work of medical reform will be accomplished when the college is made merely the instructor, the license to practice being given by an official board of examiners after a written public examination.

Dr. Thomas H. Fenton, of Philadelphia, read a paper entitled

"HYGIENE IN THE PUBLIC SCHOOLS,"

in which he said:

Two hundred and twelve thousand children attended the public schools of Philadelphia in 1880. The value of the school plant was \$6,179,750. The location of many buildings was faulty as to light and air. Ventilation especially is defective, no provision being made for the exit of foul air beyond the opening of the windows. Special care has been taken to ascertain the truth of this point by accurate and careful tests, which were described at length by the lecturer. The means for remedying this were referred to, and plans given for securing a free supply of air at proper temperature without drafts. The next defect noted was that of drainage, and the poor arrangement, especially of water closets, was considered.

Next came the important point of desks and seats, and the bad effect of careless arrangement of these upon the spine, the chest, and the eyes, was dwelt on at length. The prevalence of myopia was stated, and the difficulty of managing it without proper arrangements for holding books, etc., before the eyes of the children at proper distances was defined. The plan of allowing the light to fall directly upon the faces of the pupils was condemned, and the lack of proper illumination of blackboards was referred to. The color of walls, ceilings, and the paper of books, was stated to be very important. Many important suggestions as to the better care of the children attending our schools were made, and the paper was full of interest.

Then followed Dr. Alice Bennett's address in mental diseases. The authoress chose for her subject the

RELATION OF HEART DISEASE TO
INSANITY,

and said that it has become the privilege of those appointed to give the annual address in any of the special departments of medicine sometimes to depart from the customary and avowed object of such appointments; so that, to-day, I will ask your leave, in place of a general survey of the year's work, in the whole field of "mental diseases," to give you the results of some clinical studies of heart disease among the insane.

This subject has received but slight attention at the hands of alienists and others, and its literature is extremely meagre.

We read much of changes in the kidneys, liver, lungs, and other viscera, but comparatively little of alterations in the brain, as a result of cardiac disease.

The physiological mode of action of brain and nerve cells being utterly unknown to us, the manner in which such action may be modified can be but a matter of conjecture. But it is not unreasonable to suppose that irregularities of the circulation, such as are common in organic heart disease, may have an influence in modifying the action of an organ so peculiarly open to impressions as the brain, and whose anatomical connections with the heart are direct and intimate.

Writers on diseases of the heart refer but briefly, "some not at all," to this subject.

Fothergill believes heart affections to be rather rare among the insane, while admitting that physical disturbances are often seen in the course of valvular disease in the form of bad dreams, changes in character, etc. He also cites some cases of positive mania in the advanced stages of heart disease.

Flint says that while it is conceivable that congestion, extravasations, etc., may follow heart disease, clinical facts show that serious cerebral disturbances are rarely seen.

The standard works of the day on mental diseases are equally indefinite and unsatisfactory.

Griesinger concludes that the influence of cardiac disease was very much over-estimated by the older writers, and quotes statistics in support of his statement that "heart diseases are rather rare than frequent among the insane."

Bucknill and Tuke cite some cases of temporary insanity in rheumatism with cardiac complications, and refer briefly to an exhaustive paper by Dr. Burman, in West Riding Reports, 1873, without other comments than that the subject "requires further elucidations." Some of Dr. Burman's conclusions given in the paper alluded to, are as follows :

1. Affections of the heart are common among the insane, 50 per cent. of 500 insane patients dying, and 44 per cent. of 680 living patients giving evidence of such disease.
2. That such disease is most frequently found associated with hypochondriacal melancholia, monomania of suspicion, and in such modified forms of general insanity as those in which the patient is morose, sullen, or impulsive.
3. That the suspicion of causal relation is justified by the frequency of coincidence.
- He found the proportion of cardiac complications in the different forms of insanity to be as follows :

Melancholia, 48 per cent.; general paralysis, 32 per cent.; recurrent mania, 27 per cent.; epilepsy, 18 per cent.; dementia, 16 per cent.; chronic mania, 14 per cent.

In the above classification, "chronic mania" evidently must include what he calls "monomania of suspicion," and probably also those characterized as "morose, sullen, or impulsive."

Dr. Savage, of Bethlehem Hospital, in a short paper also alluded to by Bucknill and Tuke, concludes that the prevailing form of insanity associated with "heart disease" is "melancholia." The following is an analysis of 500 cases examined in the "Female Department of the Hospital for the Insane" at Norristown, taken without discrimination :

	No. cases examined.	Normal hearts. . .	Abnormal hearts. .	Percentage of heart disease.	Percentage found by Dr. Burman. . .
Acute mania	18	4	14	22.2	
Chronic "	148	47	101	31.75	14.73
Recurrent "	28	9	19	32.14	27.77
Acute melancholia .	15	2	13	13.3	
Chronic "	29	2	27	8.89	48.21
Dementia	185	22	163	11.89	
Senile dementia . .	11	1	10	9.09	16.26
Paralytic "	6	3	3	50.	
General paralysis. .	3	0	3	0.	32.
Epilepsy.	28	8	20	28.5	18.18
Inbecility and idiocy.	29	3	26	20.	
Total	500	101	399	20.2	

Form of disease—	
Simple irregularity	11
Hypertrophy and dilation	4
Apical systolic murmur	70
With basal systolic	16
Total	101

The whole percentage is seen to be less than that reported by Dr. Burman, and the proportion among melancholia decidedly much smaller. In the two cases of acute melancholia given, the associated heart trouble did not hinder a rapid recovery. Feeble action of the heart was noted among the advanced dementes. Accentuations of the aortic second sound in the three cases of general paralysis also noted, as pointed out by Fothergill. There was also a very general absence of hæmic murmur.

But it is the coincidence of heart disease, with a certain form of chronic mania, to which this paper is specially designed to call attention. (Here follow abstracts of the histories of sixteen cases possessing similar features, and all presenting evidence of mitral disease.) These cases constitute a distinctive class, easily recognized by the merest novice. Some of the general features running through them that you will have noticed, are as follows :

They begin generally in middle life. The invasion is gradual, generally ascribed to no cause, or to one obviously inadequate. The first symptoms are invariably hallucinations of one or more senses, generally of hearing, and subsequent delusions of persecutions. A woman previously supposed to be in good health, begins to hear voices, sometimes through tubes in the walls, sometimes in the ceiling above her. The ringing of bells, noxious smells, the odor of chloroform, may all come apparently to her perceptions, and to her mind they very naturally assume the form of persecutions from enemies known or suspected. There follow naturally upon this suspicion of every one about her, perverted affections—paroxysms of most violent language, and sometimes of violent acts. Some of our most dangerous lunatics may be developed from this class, when the voices take the form of “revelations” or inspirations. Yet many of them are merely troublesome and noisy. They are often removed from home for the simple reason that they are obnoxious and abusive to their neighbors. Among this class we find some of the most quiet inmates of our hospitals; some not obviously insane to casual observation, who have remained in stationary conditions for years; others beginning in the same way show a tendency progressing toward a general misconception of all the facts of their daily life. In four of the cases given above, delusions as to identity were present.

The following 24 cases present salient features characteristic of this class, although not so typical and unmixed as those given above. All have hallucinations of hearing, and all have disease of the heart, generally mitral insufficiency. (Here are given short abstracts of 24 cases, of which the prominent features are hallucinations of hearing with associated delusions.)

Of the 47 cases of chronic mania found to have heart disease, 40 are given above; of the remaining seven, two began as violent acute mania, three are of a recurrent type, consisting of paroxysms with general incoherence and mixed delusions, one is of unknown history, and has delusions relating to wealth. In none are hallucinations known to be present. It is only fair to look at the 101 cases of chronic mania, showing no cardiac disease. The list comprises a great variety of conditions. A number began as violent acute attacks that have never recovered. These show all kinds of delusions, generally changing and transitory; there are some hypochondriacal and hysterical cases; a number are traced to the use of alcohol. Very many have come to us with history unknown.

A careful examination of the whole number shows only three cases which have any resemblance to those given above. One of these is deformed by disease of the spine; she has made homicidal threats in consequence of supposed injuries; one has progressing phthisis, and her insanity was attributed to alcohol; of the third, nothing is known, except that she goes about beating the walls with her shoes, probably under the influence of hallucinations.

It is not my intention to draw any inference from the above cases, which I do not offer as anything more than a rather remarkable series of coincidences. It has only been shown that among

500 patients, a certain distinctive form of mania has been found, almost without exception, associated with valvular disease of the heart, generally mitral. Whether the frequency of the coincidence justifies the suspicion of a causal relation, is for you to determine. Admitting the suspicion, it must be verified, or the reverse, by continued observations.

The Society then adjourned for the day; after which they visited the Pennsylvania Hospital, were received by the President, and entertained at a banquet by the Philadelphia Medical Society.

THURSDAY, MAY 15.

After the routine business, the

ADDRESS IN MEDICINE

was delivered by Dr. W. H. Daly, of Allegheny, in which he discussed scientific investigation and clinical observation, conversatism in medical ethics, the medical profession and its specialties.

Following this, Dr. Charles W. Dulles, of Philadelphia, read a theoretical paper, entitled
DISORDERS MISTAKEN FOR HYDROPHOBIA.

Dr. Van Harlingen then read a paper entitled
**THE PRINCIPLES OF EXTERNAL TREATMENT
IN DISEASES OF THE SKIN.**

The employment of outward applications in the treatment of diseases of the skin has always been largely empirical, a remedy having been chosen in a given case, not with the object of producing a certain desired effect in a known condition of the skin, but because it had been said to be useful in the disease supposed to be present. This “doctrine of specifics” was so prevalent some years ago that but four remedies were commonly employed in skin diseases, namely, mercury, arsenic, sulphur, and oxide of zinc. A disease was either eczema, when arsenic and oxide of zinc ointment was the specific; or it was the itch, when sulphur was to be made use of; or it was syphilis, when mercury was to be employed.

Thanks chiefly to the labors of Dr. Duhring, of Philadelphia, the study of dermatology is no longer the memorizing of an obscure and confused jargon of names. The entire subject is now clear and comprehensible. Time and opportunity are, however, lacking to the student and practitioner to become acquainted with the nomenclature and classification of diseases of the skin. It had therefore occurred to the writer that if the more commonly used external remedies could be classified according to their effects upon the diseased integument, certain principles of treatment might be arrived at which would enable the physician to treat most forms of skin disease according to the appearances presented, without this necessarily involving a knowledge of the nomenclature and classification of dermatology.

The writer then went on to sketch out a scheme by which the various outward applications commonly employed were arranged according to their effect, as protectives, sedatives, astringents, anæsthetics, stimulants, caustics, and mechanical means of treatment, giving under each head the effects of each class of applications so far as

known, together with a list of individual medicaments belonging to the class.

The paper, which was essentially tentative in character, was put forth, said the writer, with the hope of suggesting lines of treatment which might aid the general practitioner in the management of the skin diseases encountered in every-day experience.

Dr. J. H. Musser, of Philadelphia, then read a paper on

A MODIFICATION OF THE SPHYGMOGRAPH,
BEING A CHANGE IN THE BASE OF
THE INSTRUMENT OF POND,

which will appear in full in our next issue.

Dr. J. V. Shoemaker read a paper on

JEQUIRITY (ABRUS PRECATORIUS LINNÉ):
ITS USE IN DISEASES OF THE SKIN.

After giving a full account of the history of this interesting drug and its use at various times, dating back to antiquity, the doctor gives a description of its appearance and parts used, their chemistry, which denotes nothing of the active properties it displays. Its innocent nature, its use as food, along with the above, led the writer to infer that its activity must be looked for either in a new compound formed on addition of water, or the fact that it forms a rich nurture field for atmospheric bacteria. The rapid fungus formation in its infusion induced him to adopt the latter theory, especially, as if these are destroyed by either boiling or antiseptics, the infusion is rendered inert.

Its use in affections of the eyes, first empirically developed by the natives of Brazil, has been closely studied by eminent ophthalmologists, and pronounced by them as of marked value in granular affections of the lids, though so powerful as to deserve great caution in its application. Its result, when so applied, is to produce a specific ophthalmia of a croupous nature, which destroys the granulations and leaves them in a favorable condition to heal. This had led the writer to the deduction that it might be applicable to other morbid processes consisting in exuberant granulations, proliferating cell-growths, and with a tendency to remain in a slowly-degenerating condition, where caustics, escharotics, and superficially-destructive measures seem indicated. While evidently the fungoid development is at the expense of the albuminous components of its infusions, he also deduces that the destruction of cell-growth is caused in a similar manner, and that its own existence is ultimately destroyed by over-production, and the exclusion of atmospheric air by the detritus caused therefrom.

Selecting lupoid conditions, epithelioma, sloughing ulcers, etc., as tests for his theory, he found that a weak infusion, such as is used in ophthalmic practice, was of little avail, and obtained as a more serviceable application an emulsio-infusion from Dr. L. Wolf, the well-known chemist. This, when first applied, produced no pain, but soon set up a specific inflammation, which at times assumed quite alarming proportions, œdematous swelling, with erysipelatous appearance of the surroundings, accompanied by febrile symptoms, though this occurred only in applying it to exten-

sive surfaces, and in highly sensitive and irritable patients. The products of this inflammation cast an immense crust on the surfaces, under the protecting influences of which the constructive process rapidly developed, so that after either forcible detachment, or better spontaneous casting off of the cuirass-like crusts, new and healthy surfaces were apparent, and on repeated applications cures were speedily affected by it.

Dr. Shoemaker demonstrated this by cases from the Philadelphia Hospital for Skin Diseases, all of which showed the greatest improvement and entire cicatrization.

He sums up by stating that he considers jequirity a most powerful agent in certain affections of the skin, and though only to be used under careful supervision and with due caution, it generally gives most excellent results in the class of affections named by him; that it has a still greater field than simply that of ophthalmic practice would readily appear, and that, though his theory and its *modus operandi* may be modified in time, its valuable effect in the cases he named is indisputable, and will be more fully developed as it finds more general application and introduction.

A PLEA FOR CHEMISTRY.

Dr. Traill Green, of Easton, read a most practical and valuable paper with this title. As a result of very many years of observation and experience, he has come to the conclusion that very few physicians know as much about chemistry as they ought to, and even some druggists are very deficient in this knowledge. To illustrate the latter point, he related the experience of a friend of his, who went into a drug store and asked for *chlorate* of sodium. The druggist told him and persisted that this was table salt, not seeming to understand, as Dr. Green said, that there is a difference between a *chlorate* and a *chloride*. He considers it essential that physicians should know more about chemistry, in order that they might avoid prescribing explosive mixtures, as has frequently been done. He warns us that potassic chlorate, glycerine, and tincture ferri chlor., will make an explosive mixture. Potassic chlorate and catechu have been used as a dentifrice; if there is much friction in cleaning the teeth, this mixture will explode. The following formula was ordered by a physician for a woman:

R. Argenti oxidi,	gr. xlviii.
Morph. muriat.,	gr. j.
Ext. gentianæ,	q. s.

Ft. pil. No. xxiv. and silver them.

The woman placed these pills in her bosom for safe keeping, and in a short time an explosion took place. Some nitric acid was put into a presumably clean vial; very soon an explosion, with a loud report, occurred, when it was ascertained that an almost inappreciable quantity of glycerine was in the vial.

In view of the fact that permanganate of potassium has been highly recommended of late in amenorrhœa, Dr. Green advises us not to use an excipient for it that is very readily oxidized, as glycerine; talc or kaolin will be safe. Fluid extract of *uva ursi* and certain samples of spirits of nitre will form an explosive mixture, as will also, sometimes, chromic acid and glycerine.

The ignorance of chemistry he attributes to the fact, that its importance is not sufficiently impressed upon the student and physician, which negligence he greatly deprecates.

Dr. Benjamin Lee followed with a paper on

"MASSAGE—THE LATEST HANDMAID OF MEDICINE,"

in the course of which he said, Benjamin Thompson, Green Mountain boy, American medical student, yankee school-master, colonel of dragoons, knight of Great Britain, chamberlain of the kingdom of Bavaria, count of the holy Roman empire, better known as Count Rumford, philosopher and philanthropist, hero of a history more wonderful than romance, never uttered a profounder thought than when he deduced the conclusion from one of his brilliant experiments on the production of heat without fire, "that anything which any insulated body, or system of bodies, can continue to furnish *without limitation* cannot possibly be a material substance, and that it appeared to him extremely difficult, if not quite impossible, to form any distinct idea of anything capable of being excited and communicated in those experiments except it be Motion." This was the germinal idea from which sprang the whole outgrowth of the modern theory of force, as worked out by such thinkers as Faraday, Grove, Joule, Thompson, Tyndall, and Mayer, as we find it elucidated, for instance, in Tyndall's "Heat as a Mode of Motion," and Grove's "Correlation of the Physical Forces."

Since heat, electricity, and chemical action are inseparably associated with the beginnings of life as well as with its maintenance, it is not too much to regard them as, in the hands of the Creator, the means of its source and origin. And as all of these exhibitions of divine power can be traced back to motion as the ultimate cause or their essential condition, it follows that we must look upon motion as the source and conservator not only of force, but of life.

If now, changing our point of view, we look at the processes of animal life from within, we find as the latest development of physiological research, the animal cell, with the incessant motion of its contents within and through its walls by constant endosmose and exosmose, as the unit and exponent of life, both in its origin and its perpetuation. Irregularity or retardation of motion in the cell contents constitutes disease; cessation of this motion is death. We may, therefore, not inappropriately define a state of health to be one in which the motions of the cell contents are normally carried on. This condition being disturbed, what can be at the same time more natural and more scientific than to introduce motion from external sources to regulate and restore it? This is the function of massage.

When I mention that I have now been familiar with this therapeutic means in the management of chronic functional disease of all kinds, and in the treatment of the sequelæ of local inflammations, for a quarter of a century, I think I shall be absolved from the charge of undue haste or rash enthusiasm, in now for the first time introducing it to the notice of this distinguished body.

By *Massage* I understand the communication of

motion to the tissues of the living human body from an external source, for therapeutic purposes.

The word *massage* comes to us from the Greek through the French, and means simply "*kneading*," the idea to be conveyed being that the operator works the flesh as the baker works his dough. It is better to use the French word than to translate it into English, because the English equivalent is used to describe one of the particular modes of massage, and because it has now a well-established position and definite signification in scientific medical literature all over the world. The attempt to belittle the system by calling it "*rubbing*"—an entirely inadequate designation—can only react on those who employ it, by indicating their partial education and their lack of familiarity with the recent literature of other countries. Avoiding the superfluous verbiage of French writers upon the subject, I adopt the simple nomenclature of Metzger, of Amsterdam, who has done more than any one individual for the scientific elucidation as well as the practical advancement of the art, and name four methods of procedure in massage—*stroking*, *kneading*, *friction*, and *percussion*.

Vibration is a modification of *kneading*. It consists in making the alternate pressure and relief from pressure which constitute the essential features of that form of massage, with extreme rapidity. It may be imperfectly done by the hand, but much more effectively with the aid of a machine, since with this alone can the alternations be made with the requisite frequency.

A knowledge of the physiological effects of massage at once affords the clue to its therapeutic applications. And be it here observed that not the least among its advantages as a remedial agent is the fact that its mode of action is physiological and not pathological—that it removes one diseased process, not by substituting for it another diseased process, as is the case in the operation of internal remedies, but by substituting directly the condition of healthy action. Hence, if performed skillfully and judiciously, there need be no fear of any unpleasant after-results, such as can so often be traced to the administration of drugs, and which may ultimately prove as serious as the original disease. The injury done by the habitual, immoderate use of laxatives by women is an illustration of this fact.

Cervical massage, or massage of the neck, depletes the blood-vessels of the scalp and brain, and may, therefore, be used with great advantage in all congestions of the brain or its membranes, acting powerfully and rapidly, like a copious blood-letting without the pernicious effects of the latter. In the congestive form of sunstroke it is of great value, and also, as pointed out by my friend, Dr. Mills, in the congestive headaches.

Abdominal massage stimulates the circulation of the blood and flow of lymph in the digestive organs, and is extremely serviceable in torpor of the liver, taking the place of the time-honored blue pill; in dyspepsia, especially of the atonic form; in constipation and diarrhœa; in abdominal dropsy, and in congestive and inflammatory conditions of the womb and its appendages. The power which it possesses of removing articular effusions points to its use in all inflammations of the

joints, whether the result of injury or not, whether acute or chronic, except that where the existence of pus is demonstrated, care must be used not to cause its too rapid absorption into the lymphatics. By its employment, the treatment of *sprains*, those opprobria of surgery, which an eminent authority has asserted are responsible for more amputations than all other causes combined, is reduced from a matter of months to one of days.

Anchyllosis of the joints, when not purely osseous, which is of comparatively rare occurrence, and *old rheumatic stiffness* of the joints, can be overcome by this means to a remarkable degree, and often in a surprisingly short space of time, by associating it with simple acto-passive movements. Its ability to relieve pain by producing numbness of the nerves points to it as an agent of great value in the *neuralgias*, especially those in which there is an injected or varicose condition of the vessels of the neurilemma. *Sciatica* has been the form in which it has yielded the most brilliant results, although I have seen an obstinate neuralgia of the brachial plexus, which was rendering life a burden, entirely relieved in five sittings. *Hysteria*, in all its protean manifestations, the so-called fashionable *neurasthenia*, *spinal irritation*, exhaustion of the great sympathetic nerve, and all the nameless types of chronic invalidism, as demonstrated by the brothers Taylor, in New York, and by our distinguished fellow member, Weir Mitchell, in this city, may be successfully treated by it when all other means of cure have been exhausted with only negative, if not pernicious results; and this because it goes to the beginnings of life, of assimilation, and of nutrition, and, commencing in the cell, builds up the system atom by atom, until the individual is literally reconstructed in body, and to a considerable extent even in mind. The same remark applies to its value in aiding convalescence from fevers and other wasting acute affections, and from surgical operations. Its influence in developing muscular tissue indicates it as especially useful in *infantile* and some other forms of paralysis. Even in *locomotor ataxia*, vibrations have been known to produce decided amelioration.

Certain spasmodic affections of the muscles also, such as chorea and writer's cramp, have been treated by it with the happiest results.

In short, not to amplify this already too long catalogue, whenever we desire to profoundly modify the processes of nutrition, to remove effete material from the system, to stimulate assimilation and invigorate digestion, to soothe nervous irritability and relieve nerve pain, to remove morbid deposits from the neighborhood of inflamed joints, and thus restore them to their normal mobility, to equalize the circulation, sending the blood from the hot head, congested spine, engorged liver, or laboring heart, into the cold extremities, we shall, if we are wise, use massage.

If we know how, and can spare the time, we shall do it ourselves. If, as is more than probable, we do not know how, or have not the time to devote to it, we shall employ an experienced masseur or manipulator to do it in our stead, but for the reasons stated, and not because it is in any way beneath our dignity to do it ourselves.

What then shall guide us in our choice of a manipulator? He or she, for both sexes may suc-

ceed admirably as *masseurs* or *masseuses*, must possess—first, vigorous health; secondly, muscular strength; thirdly, a cheerful temperament, a pleasant face, and an acceptable manner; fourthly, a soft and pliant, but strong hand; fifthly, a fair education and a certain amount of refinement; sixthly, a knowledge of the leading facts in anatomy, such as the position and course of the larger arteries, veins, and nerves, and of such facts in physiology as the functions of the various organs, the course of the circulation, and the general processes of nutrition; and seventhly and lastly, an acquaintance with the effects produced by the different forms of manipulation, the order in which these different forms should be employed in order to produce certain general effects, the injury which may be inflicted by employing them improperly or out of their proper order, and a practical dexterity in their application, to be attained only by training under an experienced instructor. Hence it will be understood that we cannot take John from the stable and Biddy from the wash-tub, and in one easy lesson convert either into a safe, reliable, and efficient manipulator. Massage is an art, and as such must be acquired by study and patient practice, under competent guidance. It cannot be picked up at an hour's notice, by any broken-down nurse or disappointed cobbler. As certainly as a trained nurse is superior to an untrained, so certainly, even more certainly, is a trained and well-instructed manipulator better than a self-taught "rubber." In this as in every art, in the words of the great Roman lawyer: *Quamvisque norit artem in hac se exerceat*.

DIPHTHERIA.

Dr. L. B. Kline, of Catawissa, read paper on this subject, in which he said that in consequence of the general and wide-spread prevalence of this malignant and fatal disease, it is one of the most important and practical subjects that can be brought before this Society. While it is one of the oldest epidemic diseases of which we have any knowledge, there is still a great deal of ignorance prevalent in regard to its true etiological and pathological character, and more than a little empiricism in its treatment.

Diphtheria may be defined as an acute, specific, contagious, and infectious disease, of a miasmatic character.

It is both local and constitutional in its character, manifesting itself locally by a fibrinous exudation on the mucous membrane of the throat, this frequently extending to the air-passages, constitutionally by febrile excitement, with its concomitant symptoms and general poisoning of the system.

As to whether the disease is primarily local or constitutional, is still a disputed question. To my mind, the weight of reasoning on the subject is in favor of the former view. The fact that it is usually sudden in its onset, and affects only mucous membranes that are so situated as to be specially exposed to poisonous particles floating in the atmosphere, it seems to me is strong presumptive evidence that the seeds of the disease are deposited locally, and that the general or blood disease is the result of the local affection.

While the peculiar diphtheric deposit may not be visible at the appearance of the first symptoms of the attack, yet as the primary stage manifests itself in the fauces, simply by a hyperæmic and inflammatory condition of the mucous membrane, it is no argument against this hypothesis.

Having located itself on a structure that readily allows the absorption of the infecting material, the general system soon becomes involved, as is indicated by chilliness, succeeded by an increase of temperature and a degree of prostration proportioned to the severity of the attack. That the disease is largely spread by contagion cannot be doubted, yet it is a well-settled fact that sporadic cases recur spontaneously.

Among the causes that favor the development of diphtheria, may be mentioned a want of cleanliness, undue exposure to decaying vegetable and organic matter, sewer-gas, any impure condition of air respired, to whatever cause it may be due.

That malignant diphtheria is highly contagious is now generally admitted; not only is it spread from one individual to another by personal contact, but I am satisfied that it may readily be transmitted by clothing and other objects that have been exposed to the infecting material. The time intervening between exposure to the diphtheritic poison and the occurrence of the disease varies, according to my observation, from two days to two weeks.

In the epidemic that occurred in this town in 1879 and 1880, in the majority of the families in which the disease prevailed, the interval between the attacks of the different members was very short, frequently not more than a single day, while in a small number of instances from one to two weeks would elapse from the occurrence of the first case until a second member of the family was attacked. In one family of seven children, I found a new one down with the disease each successive morning until all were ill.

The history of the following cases shows the danger of those who have recently recovered from the disease, but are still suffering from its effects, coming in contact with healthy children.

A young daughter of Mr. S. was taken sick on March 2. On being called next morning, I examined the fauces, and found it was a well-marked case of diphtheria. Upon inquiry I learned that a sister of Mr. S. was visiting at the house, with three children who had recently recovered from a severe form of the disease, one of the family having died. One of the children, who was still suffering from a sore nose, slept with a daughter of Mr. S. on the Friday night preceding her sickness. There is no doubt in my mind but that the disease was communicated in this way, as there were no other cases in the vicinity, and the disease did not spread to any other family. Three cases occurred in the family of Mr. S.

Physicians should urge a greater degree of caution on the part of families having the disease. Healthy children belonging to the family should not be allowed to attend the public schools, or any place where they are likely to come in contact with other children.

I wish specially in this connection to call attention to the important question of the relation of certain vegetable organisms to diphtheria; the evidence in favor of their presence, as a very impor-

tant factor in an etiological sense, is constantly accumulating, and at present there is a well established connection between the micrococcus species of bacteria and diphtheria. The microscope reveals their presence in a large proportion of cases examined; whether they are present as a result or cause of the diseased process may not be so well settled, but their almost constant existence indicates the importance of the subject to such an extent as to excite the hope that further investigation will develop such new light as will lead to a more rational and successful treatment of the disease. This theory is strongly supported by Oertel, Bartholow, Edward F. Willoughby, and others, all of whom maintain that the presence of bacteria is essential to the diphtheritic process, while the former, who has thoroughly investigated the subject, says, "without micrococci there can be no diphtheria."

In a pathological sense the local lesions have a close connection with the general morbid action. Locally, we find hyperæmia and inflammation of the mucous and subjacent structures of the fauces and pharynx, the diseased action frequently extending to the nasal passages, and sometimes to the larynx and trachea; in very rare cases it may by contiguity of surface invade the stomach, though more frequently the stomach affection is of a secondary character.

In the epidemic already referred to, several instances occurred where patients who were apparently convalescent took suddenly with sickness of the stomach and vomiting of shreds of membrane, these symptoms being quickly followed by prostration and death. In some of these cases the results may have been due to blood poisoning, but in others I believe death was the result of the stomach affection.

Among other pathological changes that may be noticed as having an important bearing on the prognosis and treatment of diphtheria, is that of albuminuria, a weakened muscular condition of the heart, and a toxic condition of the blood. Marked swelling of the neck indicates a severe or malignant form of the disease.

In the treatment of diphtheria, two important objects are to be arrived at: the first to combat and control the local affection as quickly as possible, in order to prevent as far as practicable the absorption of the poisonous deposition; second to endeavor to neutralize and destroy the poisonous particles already absorbed, and thus reduce to a minimum the deleterious effects upon the general system, at the same time supporting the strength of the patient until the crisis is passed.

Recognizing it as a specific and infectious disease of a parasitic nature, the rational and common-sense course of treatment would be, if possible, the destruction of the micrococci, before their full baleful effects are accomplished; but the fact that the constitutional symptoms follow so closely the local affection, makes it in the majority of cases impossible thus to check its progress; yet, though it is claimed by most leading authorities that it is impossible by any means in our power to annihilate the infectious principle, however thoroughly the local application may be made, the object aimed at in all scientific investigation into the etiology of diphtheria, should be the

discovery of a specific remedy, one possessing the power to destroy the vegetable organism.

In this connection, I desire to refer to Dr. Alfred Carpenter, who in the *British Medical Journal* of March 1, 1884, claims to treat the disease on scientific principles, by destroying the parasites in the following manner—he says: “I apply the powder of washed sulphur to the throat very frequently, blowing it into the fauces and applying by means of a brush, with a little glycerine or honey, alternating the application with a little sulphurous acid in solution.”

Bartholow highly recommends the use of washed sulphur, applied by an insufflator.

Topical applications to the affected parts I consider of great importance. Caustic applications, however, should be discarded, as their utility is doubtful, and injurious effects are likely to ensue from the mechanical irritation produced.

The local applications relied upon by myself are equal parts of the tincture of the chloride of iron and glycerine, applied with a mop; also carbolic acid and glycerine applied in the same manner.

Where the patient is old enough to gargle, the following is one of the most valuable combinations that can be employed:

R.	Acid. lactic,	gtt. xx. to xxx.
	Sps. rectific,	$\frac{2}{3}$ ijs.
	Glycerinæ,	$\frac{3}{4}$ ss.
M.		
S.	—Gargle frequently.	

The lactic acid has a solvent effect upon the false membrane.

One of the most valuable and indispensable local remedies at our command is that of hot medicated vapor. My manner of using it is in the form of hot tea, to which twenty or thirty drops of carbolic acid is added to a pint of the tea. In malignant cases this should be made use of every half hour, and continued from ten to fifteen minutes at a time. Its advantages are that it excites an abundant production of the pus, thus hastening the detachment of the false membrane, while at the same time we have the benefit of the antiseptic effects of the carbolic acid.

The vapor of slaking lime is highly recommended from the author's experience. Also ice. Warm poultices around the neck are believed to benefit the swollen glands and encourage suppuration.

As constitutional remedies, the following are recommended: Tincture of the chloride of iron, quinine, chlorate of potash, quinine in antipyretic doses when fever is high.

Pernanganate of potash has been used with success by the author.

The carbolic acid and iodine treatment advocated by Bartholow is endorsed as a rational mode of treatment.

Alcoholic liquors are recommended as valuable to prevent systemic infection, and for their stimulating and supporting qualities. They should be employed early and continued throughout, the quantity used to be regulated by the special demands of each case. In the malignant form of the disease, they cannot be dispensed with.

Stress is laid upon the importance of proper nourishment, the most reliable articles of diet

being milk and animal broths; the former should be used as the chief drink.

In the local treatment of laryngeal diphtheria, great reliance is placed upon hot medicated vapor, as already spoken of, and slaking lime, used frequently and persistently, also nauseants and emetics. The general treatment is similar to that already recommended.

(Concluded in next number.)

Infanticide in France.

A report has been recently made to the President of the French Republic, in which it appears that in 1882 legal proceedings were taken with respect to 171 cases of infanticide, 19 abortions, and 177 of what is termed the suppression or exposition of infants. The report then goes on to explain that the proportion of acquittals for each of these crimes amounts to 42. 55, and 61 per cent. respectively. As we may be morally certain that nearly every one of the accused was in reality guilty, the enormous proportion of acquittals must seem inexplicable to those who are not intimately acquainted with the conditions of French society. Just, however, as this official report was in course of publication, a seamstress, living in a garret in the Boulevard Voltaire, committed suicide by means of charcoal fumes. The following words were found on the mantelpiece: “I die because I am abandoned at the moment I am about to become a mother.” This simple incident explains the statistics we have quoted. The search for proof of parentage is forbidden by the French law, and French juries, knowing that the law gives no protection to betrayed and abandoned women, cannot be made to convict, even where the guilt is patent.

Medical Society of New Jersey.

The next annual meeting of the Medical Society of New Jersey will be held in the Stockton House, at Cape May City, on Tuesday and Wednesday, June 10–11, 1884. The annual address by the president, Dr. S. Wickes, will be delivered on Tuesday evening. A complimentary train for the physicians and their families will leave Camden for Cape May on Tuesday at 12 o'clock m.

Orange, May 10.

WM. PIERSON, Sec'y.

Items.

—A testimonial dinner will be given to Professor Alfred Stillé, at the Bellevue Hotel, in this city, May 22.

—Dr. Robert T. Edes has been appointed to fill the Chair of Clinical Medicine in Harvard University, made vacant by the death of Dr. Calvin Ellis.

—Prof. Cantieri, of the Medical Clinic at Siena, relates two cases of large ovarian cysts, which were completely cured by intra-cystic injections of tincture of iodine.

—The New York Cancer Hospital is reported to have received a gift of \$200,000 from Mr. John Jacob Astor, together with a number of smaller sums from others.

—Of the 37,672,048 inhabitants of France, 1,101,090 are foreigners, of whom 432,265 are from Belgium, 240,733 from Italy, 81,986 from Germany, 73,781 from Spain, 66,281 from Switzerland, and only 37,006 from the British Isles. The number of naturalized foreigners is only 77,046.

—A Summer Hospital for Children, designed to accommodate about thirty patients, is in contemplation by the people of Rochester, to be built on the shore of Lake Ontario.

—Unwholesome wells in Brooklyn, to the number of ninety-two, have been ordered to be closed by the Board of Aldermen, having been condemned by the Board of Health.

—Prof. Nussbaum recommends a few drops of oil of cloves to be dropped in the towel or apparatus used for the administration of chloroform, in cases where the chloroform is disagreeable.

—The Contagious Cattle Diseases Bill, providing for the "Bureau of Animal Industry," has passed the United States Senate with some amendments, chiefly the reduction of the appropriation to \$150,000.

—In the *Australian Medical Journal* Dr. Walsh reports a case where, twenty-nine days after the birth of a child, a second one was born. The woman had been attended by a midwife. She had made a good recovery, had nursed the first child, and was perfectly unaware meanwhile that she carried a second in utero.

—M. Abel Damour has succeeded in obtaining information of thirty women who have recovered from Porro's operation. In twenty-two cases, the catamenia ceased entirely, and nothing particular was noticed at the time of the period. Professor Porro observed once a swelling of the pedicle and a mucous discharge from the scar. In the remaining seven cases, reported by various authors, hemorrhages took place at the time of the catamenia from the vagina, rectum, bladder, nose, or lungs. Dr. Ramello's patient, who was operated on in July, 1880, suffers every month from slight epistaxis and headache.

—The death-rate of Russia is the highest in Europe. This is attributed to the paucity of medical men, and the habits of the rural population. According to late returns, the average duration of life is only 26 years, and the mortality among infants is frightful. More than 60 per cent. of infants die before they reach their fifth year, and nearly 2,000,000 children perish every year. Of 8,000,000 boys, only 3,770,000 attain the age of military service—that is to say, their twenty-fifth year; and of these at least 1,000,000 are found, by reason of shortness of stature and weakness of body, to be unfit for military duties.

—The fourth annual report of the Central Sanitary Bureau of the Japanese Government covers the year July 1, 1878–9, and contains much curious information. The number of medical students in public schools and hospitals was 4,313, but only 2,868 were pursuing a strict course. Licenses were granted to sell nearly 5,000 different kinds of patent medicines; yet this number represents a large falling off since the year before. As in the case of our "bitters," venders carried on a profitable trade in sake without paying the wine

tax, by mixing with ordinary Japanese wine a small quantity of some medicament.

Personal.

—Dr. J. D. Y. Madeira (class 1883 Jefferson Medical College) has located at Grantville, Dauphin county, Pa.

MARRIAGES.

AYRES—ROE.—At the residence of the bride's uncle, Mr. W. I. Preston, 71 Pierrepont street, Brooklyn, N. Y., on Wednesday, April 23, 1884, by the Rev. J. O. Worth, H. Messenger Ayres, M. D., and Miss Ida Laura Roe, daughter of Mrs. Worth.

BOWSER—M'FARLAND.—At the parsonage, Poughkeepsie, N. Y., January 16, 1884, by the Rev. C. W. Millard, Mr. Seward L. Bowser, of Martinsburg, Pa., son of Dr. I. N. Bowser, and Miss Ida L. M'Farland, of Poughkeepsie, N. Y.

BOWMAN—WININGS.—At Bloomington, Neb., April 18, 1884, by the Rev. T. A. Hamilton, Dr. Fred. Bowman, formerly of Chicago, Ill., and Miss Beckie M. Winings, formerly of Westmoreland county, Pa.

BULLARD—HUPP.—AT Wheeling, Va., April 23, 1884, Dr. R. H. Bullard and Miss Annie L. Hupp, daughter of Dr. Jno. C. Hupp.

CONRAD—CAMP.—At St. Andrew's church, New York city, April 29, 1884, by the Rev. Dr. Francis Loddell, J. Reed Conrad, M. D., of Philadelphia, and Miss Genie E. V. Camp, of New York city.

DANIEL—McDONALD.—At the residence of the parents of the bride, April 29, 1884, Dr. David H. Daniel, of Otwell, Pike county, Ind., and Miss Minerva E. McDonald, of Portersville, Dubois county, Ind.

DAVIDSON—CRAVENS.—At Madison, Ind., April 30, 1884, Dr. Wm. R. Davidson, of Evansville, Ind., and Miss Elizabeth Gardiner Cravens, of Madison.

HARE—PEMBERTON.—At St. Luke's church, in this city, Thursday, May 8, 1884, by the Right Rev. Wm. H. Hare, assisted by the Right Rev. M. A. de Wolfe Howe and the Rev. Dr. Hare, Dr. Hobart Amory Hare and Rebecca Clifford, daughter of Clifford Pemberton, Esq.

HUDNUT—IRVING.—At Central church, Orange, N. J., April 30, 1884, by the Rev. D. Irving, D. D., assisted by the Rev. Albert Yeomans, D.D., Dr. Frank P. Hudnut and Charlotte Elizabeth Irving, daughter of the officiating clergyman.

JACOBUS—BURKE.—At Mattison church, Bayonne, N. J., Wednesday afternoon, April 23, 1884, by the Rev. Thomas H. Jacobus, assisted by the Rev. C. S. Woodruff, Atwood E. Jacobus, M. D., of Franklin, N. J., son of the officiating clergyman, and Miss Jennie L. Burke, daughter of J. T. Burke, of Bayonne, N. J.

MAYER—LEE.—At the residence of the bride's mother, Covington, Ky., April 24, 1884, by the Rev. Mr. Jefferson, Dr. Chester A. Mayer and Mattie Lee, daughter of the late W. M. M. Lee.

RILEY—O'PRY.—At the residence of the bride's brother, Capt. J. T. O'Pry, in New Orleans, April 10, 1884, Dr. Robert L. Riley, and Miss Sallie O'Pry, both of New Orleans.

DEATHS.

BANKER.—In Enfield Vt., April 21, 1884, W. W. Banker, M. D., aged fifty-three years.

COOKE.—At Adams, Ind., April 19, 1884, Dr. J. Mills Cooke, aged forty-nine years.

JONES.—In Evansville, Ohio, April 30, 1884, Dr. H. G. Jones, aged fifty-nine years and nine months.

MEREDITH.—At Abilene, Kansas, April 28, 1884, Dr. L. Phil Meredith, formerly of Cincinnati.

OWEN.—In Cincinnati, Ohio, after a short illness, Thursday, May 1, 1884, at 2 p.m., Dr. Jesse Owen, in the sixty-ninth year of his age.

SKINNER.—At Hartford, Conn., May 10, 1884, suddenly, Dr. Thomas H. Skinner, of this city.

THE MEDICAL AND SURGICAL REPORTER.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

A CONTRIBUTION TO THE OPERATIVE TREATMENT OF PURULENT PLEU- RAL EFFUSIONS.*

BY EDWARD T. BRUEN,

Physician to Philadelphia Hospital, and Assistant Physi-
cian to University Hospital, Demonstrator of Clinical
Medicine University, Physician in Out-patient Depart-
ment in Children's Hospital, and Lecturer on Pathology
in Women's Medical College:

AND J. WM. WHITE,

Surgeon to Philadelphia Hospital, Assistant Surgeon to
University Hospital, Demonstrator of Surgery and Lec-
turer on Operative Surgery in University.

The following paper is based upon thirteen cases of empyema treated since 1877 in the Philadelphia Hospital, and in that of the University of Pennsylvania. They are selected from a number, because their history has been followed closely throughout. In two of these cases resection of the ribs was practiced; one of them will be subsequently detailed, and the portions of ribs removed will be exhibited. A third case, an adult Italian with an empyema of three weeks' standing, was treated by aspiration, with subsequent introduction of a drainage-tube, which was removed within three weeks with a result of perfect recovery. A fourth case, also an Italian, with purulent effusion dating six weeks prior to operation, was treated with a single aspiration, with a result of cure. The history of the fifth and sixth patients will be subsequently described; of the remainder three are still under observation. In these last three drainage-tubes have been inserted, and the cases have been steadily improving; one of them will be presented this morning. Four other cases have been entirely convalescent for

three years, but still retain an open sinus, from which there is a slight discharge.

CAUSES OF EMPYEMA.

The pleura possesses the power of very rapidly secreting pure pus; our clinical records showing instances in which purulent collections have accumulated in thirty-six hours. In some of these cases the general health had been depreciated by intercurrent disease other than pleural. In one instance in the University Hospital, aneurism was associated with old pleural adhesions; in another phthisis was the antecedent.

In children the rapid formation of pus is proverbial, and in pleuro-pneumonia the effusion is often semi-purulent. Acute pleurisy can terminate in cure, or in sub-acute or chronic inflammation, with effusion, or in the same with adhesions, or empyema.

It is important to determine the proportion of purulent formations which result from undisturbed pleural effusions.

Trousseau and writers of his day advocated paracentesis, dreading purulent transformation if treatment was delayed.

Albutt (*Practitioner*, vol. 2, '72, p. 77), writing in 1872, shared this view.

The chief predisposing condition towards the purulent transformation of undisturbed pleural effusions is lowered vitality, scrofulous constitution, and intercurrent disease.

The operation of paracentesis in serous effusions is often not practiced for fear it may favor purulent transformation. This result need not be feared, if care is exercised to prevent the admission of air or organisms within the chest, and if at the same time clean antiseptic instruments are used. The accidental admission of air under the above circumstances is not necessarily serious. The predisposing causes of empyema consequent

* Read before the Medical Society of the State of Pennsylvania, at its meeting in Philadelphia, 1884.

upon paracentesis are similar to those which favor purulent transformation in undisturbed pleural effusions. Sero-fibrinous pleural effusion complicating phthisis is not frequent, for the pleurisy of this disease commonly consists in the effusion of dry lymph. If sero-fibrinous effusion does occur, it is readily convertible into pus. The operation of paracentesis does not increase the tendency to purulent transformation, and is positively indicated, since there is but little disposition for these effusions to be reabsorbed.

In phthisis, pleurisy occurs whenever hydro-pneumothorax is produced by rupture of the visceral pleura, and the effusion usually soon becomes purulent.

Collections of pus in the chest-wall may follow wounds of the pleura or fractures of the ribs, and peri-hepatic inflammations; or abscesses of the liver may perforate the pleura and produce empyema.

TERMINATIONS.

Empyema may last months, or years, terminating in evacuation of the pus externally through an intercostal space, or it may be evacuated through a bronchus. More rarely an empyema is evacuated through the diaphragm into the peritoneum or colon, or into the mediastinum, thence along the vertebral column as far as the psoas muscle; or through the tissues forming the abdominal wall, and so outward.

The termination of spontaneous external evacuation through an intercostal space may be preceded by periostitis with subsequent caries or necrosis of one or more of the ribs, and it is preceded by œdema of the intercostal tissues.

EFFECTS OF A PLEURAL EFFUSION UPON THE LUNG.

1. The lung may be compressed until the air is absolutely expelled and the lung itself is flattened into a small space against the vertebral column, occupying an area mostly in the scapular region, sometimes not larger than the palm of the hand.

2. The fluid may force the lung upward, so that we may outline it anteriorly, perhaps so low as the second rib, and the lung occupies a variable area of the scapular region.

3. The lung may be bound down to any portion of the chest wall, or flattened upon the diaphragm. The substance of the lung may be hep-
atized, or the compression may result in complete atrophy of the lung.

DIAGNOSIS OF EMPYEMA.

The diagnosis of empyema presents the usual group of physical signs indicative of non-purulent pleural collections. The crucial test is by

puncture; for large collections of pus may persist in the chest with an abnormal temperature, yet without the range characteristic of collections of pus. The cases on which these observations have been made were usually those of chronic pulmonary and pleural disease, in which the pleuræ were thickened and indurated. The diagnostic puncture can be effected by a hypodermic syringe attached to a needle rather larger than the one in ordinary use.

INDICATIONS FOR TREATMENT.

In the scrofulous, or those predisposed to phthisis, it is difficult to say how long the lung may be compressed, and yet, after recovery, dilate so as to fill the chest when the pressure is removed. The healing process in a pleural cavity after effusion, whether serous or purulent, occurs through the medium of adhesions of the inflamed pleural surfaces.

Every movement of the chest parietes, then, drags the surface of the lung with it. During the persistence of the fluid the degree of motion is small, for the ribs, pressed out by an excessive quantity of fluid, are prevented from rising or falling, whilst the distension of the chest diminishes the elasticity and favors paralysis of the intercostal muscles. When the fluid is evacuated or absorbed, the character of the respiratory movements is improved, and they diminish in frequency as well as in shallowness. The lung being now adherent, is dragged by the ribs in all their increasing movements, and as the lung expands the adhesion to the chest wall increases. Each fresh expansion of the lung results in further adhesion to the costal surface, which then acquires more power over the lung to promote its return to the normal state.

Some authors* contend that air admitted into the pleural sac is opposed to the healing process of an empyema. In reply to this it may be said that the forces of expansion of the chest, are the column of air inspired, the elasticity of the thoracic parietes, and the action of the respiratory muscles, assisted by the natural tendency of the visceral pleural surface to adhere to the costal pleural surface by an action similar to that seen in a boy's sucker. The opposing forces are the elasticity of the lungs, and possibly the small amount of air contained within the pleural cavity. These latter forces are manifestly inconsiderable, when compared with the forces inflating the lung, and the granulating pleural surfaces will naturally tend more readily to adhere than the physiologically smooth pleural surfaces. With this allusion to the method by which an empyema is healed,

* Cabot, Boston Med. and Surg. Jour., August 16, 1883.

and in view of the danger of prolonged compression of the lung under these circumstances, added to the plain general principles of surgical experience in the treatment of purulent matter in the pleural sac, we submit the following indications for treatment:

Purulent effusion should be evacuated by careful aspiration as soon as recognized. The tubing and needles should be first immersed a few minutes in carbolyzed boiling water. The subsequent treatment in children and adults differs. In the former a cure may be accomplished by one or two aspirations. An almost indefinite list of cases outside of our own experience could be submitted to attest this point.* In children, when aspiration fails a free incision into the chest is often sufficient.†

Drainage-tubes can sometimes be disregarded in very young children, because their chest-walls are so elastic that collapse of the cavity and its obliteration by adhesions is perfectly practicable. As the age of children increases the state of their chest-walls approximates that of the adult, and after the age of ten years the treatment is usually identical. This treatment should be a preliminary trial of aspiration, but absorption failing to occur, a prompt recourse must be had to drainage by the introduction of a tube into the chest through an intercostal space, in a manner to be hereafter described. This tube should be sufficiently large to secure constant free drainage and thus prevent the stagnation of the pus and its decomposition. If thorough drainage is accomplished, the use of disinfectants by intra-thoracic injections is rendered unnecessary, unless a stimulant to the granulating surface is required. In this latter case the usual surgical principles should govern the character of the solution and its strength, the writer's preference being given to Lugol's solution.

When purulent pleural effusions occur in the course of phthisis, or in this disease when complicated with pneumothorax, the propriety of operative treatment has been already indicated.

Resection of the ribs should be practiced upon indications drawn from anatomical considerations.

If the opening through the intercostal space fails to provide sufficient drainage, or if the discharge continues three or four months with a deleterious effect upon the general health, and a physical examination shows that the pleural cavity, although diminished in size, is still so large that it is improbable that obliteration of the cavity can occur, resection of one or more ribs should be practiced. This operation offers freer access to the cavity of the pleura, and also allows the chest wall to collapse to such an extent as to produce obliteration of the cavity by permitting its walls to approximate one another.*

Finally, with reference to the withdrawal of the drainage-tube. This should be done as soon as a physical examination shows that the lung has descended sufficiently to allow approximation of the surfaces of abscess. When this has occurred, the presence of a drainage-tube in a sinus becomes a source of irritation. The sinus can be packed with lint, and treated on general principles.

Having decided in any case that no disposition exists to spontaneous closing of the cavity after the performance of paracentesis alone, and that it is necessary to supplement this operation by one looking to the thorough, complete, and *continuous* drainage of the suppurating region, the question which presents itself is how best to secure this drainage.

This, it seems to us, after a careful review of the matter from both a clinical and an anatomical standpoint, is not a difficult one to answer. The general principle which applies to the treatment of extra-thoracic abscesses applies here. To do away with the possibility of accumulation of pus, to obviate the necessity for frequent and often mischievous interference with the granulating inner surface of such cavities by injection or irrigation, the most dependent point consistent with safety to neighboring tissues or organs is always selected for the puncture.†

This point is to be found on the right side in the seventh intercostal space, and in a line with the posterior border of the axilla. On the left side it should be one space lower, and in the same line. More posteriorly the ribs and intercostal spaces

*1. Dr. J. Hunt, Med. L. and Gaz., Feb. 15, '79. Child 14 mos. Two aspirations. Cure. 2. N. Y. Med. Rec., 1879. Child 2 years of age. Two aspirations. Cure, with thickening of pleura.

†See case Dr. G. Post, Beiruth, Syria, girl 8 years. Two asp. incision. Cure 2 mos. J. Healey and E. P. Hind, N. Y. Med. Rec., 1879. Child 3 years. Two aspirations between seventh and eighth ribs near angle. Incision between ninth and tenth rib. No drainage-tube. Recovery in a month.

*See Dandridge's cases, Exsec. of Ribs in Treatment of Empyema, Ohio Med. Jour., 1881-2, p. 57.

Homen's rev. of Estlander's, Management of Empyema by Resec. of Ribs. Arch. für Klin. Chir., Berl., 1881; also Korting, in Puncture Incision, Resec. and Antiseptic Inject.

†It has been stated (Powitt, op. cit., p. 144) that "the only point of resemblance between an empyema and an abscess is the pus which each contains." But for our purposes the above establishes the parallel quite sufficiently, even admitting it to be true, which we are not inclined to do.

are covered by large masses of muscle, the intervals between the ribs are greatly diminished; the intercostal arteries running more horizontally than the ribs themselves, cross the spaces diagonally, and are thus exposed to injury. More anteriorly the higher level of the diaphragm not only exposes it to injury during the operation, but by exercising pressure on the drainage-tube interferes with its satisfactory action; and then, too, the opening is not by any means in the most dependent position in the usual posture of a patient after this operation.

The eighth intercostal space on the left side, and the seventh on the right, may be most easily found by tracing outward the seventh rib, which is the lowest attached directly to the sternum, and which forms the upper boundary of one of these spaces and the lower boundary of the other. Or the rule given by Mr. Powitt may be adopted, viz.: Mark on the skin the position of the angle of the scapula, when the arm is by the side and also when the arm is raised above the head; one inch below the middle of the line drawn between these two points will be found the desired spot. It should be said, however, that, though this leads accurately to the eighth interspace, the "spot" described by him is in our judgment somewhat too far posterior, and, at least from the operative point of view, is open to the objection above stated.

The claim which has been advanced that because a certain number of cases of empyema have been opened in the fifth interspace anteriorly, that point should be selected for the performance of the operation, seems to us altogether without rational foundation; first, because only a small minority of the cases of empyema open spontaneously, and not by any means all of them at that interspace; and next, because the general principle which regards the workings of "nature" in such cases as a guide to the surgeon is a misleading and unsound one, which, if adopted in other cases, would often lead to serious or fatal mistakes.

Having selected the spot for the operation, its performance is extremely simple and devoid of danger. With an ordinary bistoury an incision should be made opposite the upper border of the rib, pruning the lower limit of the interspace an inch to one and a half inches in length, and extending at first through the skin and superficial fascia; the deeper fascia and the intercostal muscles should then be divided on a dissector; the pleural wall, usually found thickened and unnaturally dense and resisting, picked up with the forceps, nicked and divided to an extent equal to

the external incision, and the drainage-tube inserted. The division of the pleura will usually be followed by some hemorrhage, often quite free for a few moments; but it is almost never dangerous, comes chiefly from the granulations on the inner surface of the membrane, and subsides spontaneously. The outer end of the tube should be cut off parallel, and on a level with the surface of the chest-wall should be threaded with a silver wire or with a long thread of waxed hemp or silk, so that it may be easily recovered if it should pass into the pleural cavity. A long projecting end of drainage-tube is objectionable, because it is liable to become compressed by the dressing or by the clothing, so as to almost or quite occlude it. The same objection applies to the plan of hooking a drainage-tube around a rib and tying the ends together, one which adds slightly to the severity of the operation, necessitating another wound, and at the same time leaves the tube in a position much exposed to pressure and occlusion.

The operation should be conducted with attention to antiseptic details; and we would recommend as an excellent dressing in which to receive the discharge, a thick layer of salicylated or borated cotton, over which may be placed some layers of carbolized gauze and macintosh.

If the pus escaping from an empyema cavity which has been treated in this manner remains sweet and odorless, if there is no evidence of accumulation, and, most particularly, if the cavity seems to be diminishing in size, no further local or operative treatment is either necessary or justifiable. Attention should be paid merely to the general hygiene and nutrition of the patient, and to the perviousness and efficiency of the drainage-tube.

If, however, in spite of these precautions, the pus is found to become fetid or ammoniacal, it will be proper, recognizing that this condition, in the vast majority of cases, results from imperfect discharge, and that no use of a septic or disinfectant lotion or injection can possibly remove it, to make a second and still lower opening through the chest wall, and carry a drainage-tube directly through from one to the other, allowing its curve or belly to rest upon the floor of the cavity. This may readily be done by gently passing a long, blunt-pointed probe from the original opening across the base of the chest, carefully avoiding the diaphragm, of course, and the lung, if it is at the base of the chest (a somewhat unusual occurrence), and making the end of the probe prominent in the opposite side, in the lowest available intercostal space; then cutting down

upon it just as in making the first opening, it may be drawn through, bringing with it the drainage-tube, which should now be secured at both ends.

This will usually be followed by a marked change in the character of the discharge and in the condition of the patient; not infrequently by a rapid diminution in the quantity of the pus and in the size of the cavity, which may finally become obliterated, even although with the imperfect drainage afforded by the opening it has remained stationary for a long period.

We have had two cases which illustrate this statement, but which it is not necessary to detail, as they are the ordinary cases of empyema, with the usual symptoms, and the operations were performed after the manner just described.

In a certain proportion of cases, however, this treatment proves unavailing.

Two or three months elapse, the cavity remains as large as ever, and the patient is losing in general health and strength. It then becomes advisable to adopt some means to lessen the size of the cavity, and with it the extent of suppurating surface, and at the same time time favor the formation of those adhesions which, as has already been observed, are so useful, if not essential, in drawing the lung down and aiding in its expansion and the obliteration of the cavity.

In such a case, the operation of excision of a portion of the ribs on the affected side becomes justifiable. By permitting of the partial collapse of the chest wall on that side, it approximates the walls of the cavity, reduces its size, aids in the formation of adhesions, lessens the amount of pus secreted, and, as it may be performed with little or no danger to the patient, is evidently strongly indicated on theoretical grounds alone. And the results of the recorded operations which have been performed in suitable cases, amply justify the *a priori* view. The rules for the operation may be formulated as follows:

1. The portions of the ribs selected should be those between their angles and their sternal attachments. Posterior to this, they are less movable and are so close together that the difficulties of the operation are greatly increased.

2. Those ribs between the third and tenth should be selected which most accurately overlie the cavity.

3. The number of ribs operated upon should be proportionate to the extent of the cavity.

4. The length of the pieces excised should be proportionate to the depth of the cavity.*

*See paper by Dr. A. Homen. *Langenbeck's Archiv für Klin. Chir.*, Band xxvi., Heft. 1, p. 151.

5. The operation should be done aseptically and subperiosteally, and when so performed is almost without danger; and even in cases where large portions of ribs are removed, is followed by no permanent loss of function in the external respiratory muscles of that side.

In the case of a patient from the medical wards of Blockley Hospital, suffering from a large empyema, involving the whole pleural cavity of the left side, we performed this operation in the presence of several of our colleagues, of Dr. D. Hayes Agnew, and of the medical class.

It having been decided to remove portions of the fifth, sixth, and seventh ribs on the left side, a curved incision, ten inches in length, was carried through the overlying tissues, beginning about an inch above and within the nipple, and terminating on the axillary line at about the ninth interspace. A large horse-shoe flap, consisting of skin, subcutaneous tissue, and pectoral muscle, was reflected upwards, and the ribs exposed. A few small vessels were tied, and then the periosteum was reached from the ribs with an ordinary elevator; an eyed probe, with an abrupt curve and carrying a chain-saw attached, was passed around each rib separately at two places, and the requisite portion removed. By exercising great care in denuding the under surfaces of the ribs, employing for that purpose a gouge curved on the flat, the intercostal arteries were pushed inward with the periosteum, and it was not necessary to tie a single one of those vessels.

Two inches were removed from the fifth rib, two and a half from the sixth rib, and three from the seventh rib.

A large drainage-tube was inserted into the cavity, the external wound bandaged together by wire sutures, and an aseptic dressing and compress applied. There was absolutely no unfavorable symptoms after the operation. The greatly-improved drainage (which is one of the conspicuous benefits resulting from this operation, and is almost of itself a sufficient indication for its performance), caused an immediate improvement in the character of the discharge. The external wound united by first intention. The general

Dambrowski. *Management of Empyema by Resec. and Antisept. Inject.*, St. Petersburg. Wehn Schr., 1881. Williams, *Troph. Ribs*, N. O. M. and S. Jour., 1874, p. 830.

I. F. Wert, Birmingham, M. Rev., 1881, 2 vol., 47-58; also Tatham, on Resec. of Ribs, B. M. J., London, '81.

A Plea against Resec. of Ribs, Leall, N. Y. Med. R., 1880.

Fenger, Thoracoplastic Operation, Resec. Ribs, etc., Med. News, Philadelphia, 1882, p. 337. Roser, für Oper. des Empyem., Berl. Klin. Wochen., 1878, No. 46; also Clin. L. and Clinic, 1879.

health and strength of the patient improved greatly, and the cavity notably diminished in size.

The patient died two and a half years later of an acute bowel trouble, having outlived the average period of such cases at Blockley, and being then apparently on the road to complete recovery.

This case and the method of operation may be taken as typical, and the result is even less favorable than may be anticipated in the large majority of cases.

Our conclusions, then, may be formulated as follows:

1. Those cases of pleural effusion which are most likely to become purulent, and therefore to need operative treatment, are those occurring in persons of lowered vitality, scrofulous diathesis, or who suffer from intercurrent disease.

2. The diagnosis of empyema can only be made with absolute certainty by puncture and inspection of the fluid. This method of examination need not be delayed for fear of favoring the purulent transformation of a serous fluid, if proper aseptic precautions are observed.

3. In young children, one or two aspirations will often suffice for a cure. If these fail, simple incision of the chest without the introduction of a drainage-tube is often all that is requisite.

4. In older children, and in adults, it is proper to aspirate once; but recovery not resulting promptly, a large drainage-tube should be inserted at the most dependent point.

5. If after this drainage is still imperfect, as shown by the fetid character of the discharge, a second opening should be made, and a tube carried directly across the base of the cavity.

6. If after a suitable delay (from two to four months) there is no disposition to permanent closure of the suppurating cavity, but if the lung has expanded sufficiently to indicate that it is capable of further descent, it would then be proper to facilitate its expansion and the obliteration of the cavity by removing certain portions of the ribs of the affected side.

7. If thorough drainage is accomplished, the use of disinfectants by intra-thoracic injections is rendered unnecessary, unless a stimulant to the granulating surface is required.

8. In cases in which the lung is at the bottom of the chest and bound fast to the diaphragm, or in which it has been so atrophied prior to aspiration that there is no possibility of reinflation, or in which it is occupied by a tuberculous or an inflammatory infiltration, this operation is contra-indicated.

A MODIFICATION OF THE SPHYGMOGRAPH, BEING A CHANGE IN THE BASE OF THE INSTRUMENT OF POND.*

BY J. H. MUSSER, M. D.,
Of Philadelphia,

Chief of the Medical Dispensary of the Hospital of the
University of Pennsylvania, Pathologist to the
Presbyterian Hospital, etc.

The object of this paper is to introduce to the members of this society for their consideration a modification of the sphygmograph which is in common use in this country—the instrument of Pond—whereby it may be rendered still more practical, and hence more frequently resorted to by the profession. This is neither the time nor place to dwell upon the merits of the various instruments that have been devised, nor to discuss the mechanical and physiological questions which involve a correct appreciation of the action of the sphygmograph. A knowledge on your part of these questions will be taken for granted by the writer. In addition to asking your attention to the advantages of the modified base, a few moments will be taken up with discussing questions appertaining to the practical application of the instrument.

The sphygmograph, it will be admitted, has not become one of the indispensable articles of a physician's armamentarium, as its promoters and admirers had hoped for. This is readily understood, and depends upon many causes. But the chief of these causes is undoubtedly the length of time required to secure a proper tracing. Again, various instruments record various tracings, and hence there is a lack of uniformity, making comparative study of your own with the work of others almost impossible. The lax rules about regulating pressure have been so confusing that the operator would scarcely be able to select the proper one from the many that could be secured by varying degrees of pressure. Had we an instrument by the use of which these obstacles would be reduced to a minimum, undoubtedly sphygmography would grow in favor, and assume its proper relation in the diagnosis and prognosis of disease. It is confidently believed that the element of time at least will be reduced to the position of a negative opponent, by the proposed change in the instrument, while for accuracy its value will be enhanced.

The sphygmograph of Pond is generally conceded, in this country, to be the most readily applied. Simple in construction and mechanism,

*Read before the Medical Society of the State of Pennsylvania at its meeting in Philadelphia, 1884.

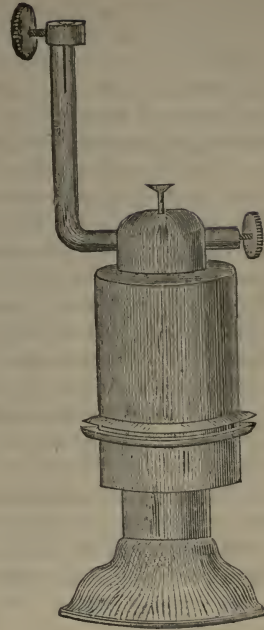
tracings can be secured by it more rapidly and with less discomfort to the patient, than with any instrument familiar to the writer. He has used the unmodified instrument several years, but often found bitter disappointment attend its use. The writer suggested to his former student and friend, Dr. H. N. Mateer, now of Wooster, Ohio, to pursue investigations with this instrument, for the purpose of incorporation in a thesis presented for the degree of M. D.* He, too, was often chagrined at meeting defeat in his designs. By careful study and great patience, he devised the changes which are presented to you to-day. To his genius are we indebted for the improvement, and to his generosity the writer is indebted for the pleasure of introducing it to you, for which he makes grateful acknowledgments.

The essential portion of a sphygmograph, in considering its merits, is that which is applied to the vessel, viz.: the base. It should be so made as to closely hug the artery, without exercising such undue pressure as would modify its calibre, in order that the arterial and blood wave should be properly transmitted to the indicator. A study of the anatomical relations of the radial artery, at its most accessible point, will show at once the character of base required. This point is where the artery rests on the bone, between the styloid process of the radius and the radial flexors of the carpus. The distance from the process to the flexor is one-fourth to three-eighths of an inch, in many cases even less. As the artery is on a lower plane than the upper level of these firm structures, it will be seen, and so Dr. Mateer reasoned, that the base or portion to be adjusted to the artery must be three-eighths of an inch, or even less, in width. The base of the Pond instrument is five-eighths inches wide, and it is, therefore, both in theory and in practice impossible to take tracings in very many instances with it.

It is true that in those cases in which the artery is superficial or the tissues are relaxed, admirable tracings can be secured with the old base—true, too, that tracings can be secured from any wrist; but it is held that they are secured with such high pressure that accuracy is sacrificed, or they are not intelligible. The base of the Pond machine was made for general work—to write tracings of the larger vessels, the heart, and aneurisms, etc.—but in so doing, the special work of writing tracings of the radial was sacrificed.

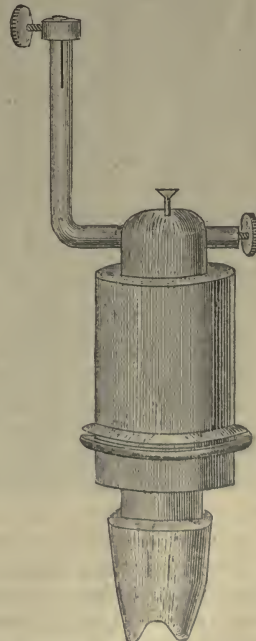
The wood cuts illustrate the differences in the bases, No. 1 representing the old, No. 2 the new

FIG. 1.



base. A further description is necessary. It is made of metal-brass, and is firmly attached to the cylin-

FIG. 2.

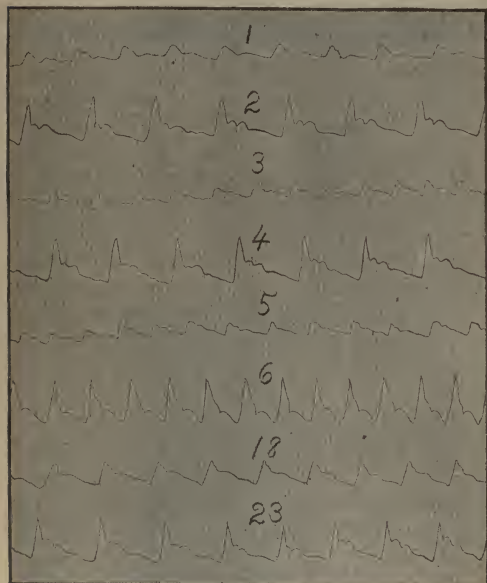


der of the instrument, yet it is readily removed

*For this thesis a prize of \$50 was secured by Dr. M. from the University of Pennsylvania.

It is longer than the old base, and tapers towards the distal end. This end is round, $\frac{3}{8}$ in. in diameter, grooved to the depth of $\frac{1}{8}$ inch. This groove was made by Dr. Mateer, so that it could be more closely applied to the vessel, with the least possible pressure. The advantage of fixation of the vessel by the groove is also gained, so that the tracing is made more regular. The increase in length of the base necessitated a corresponding increase in the length of the central transmitting rod, while the diminution of its size rendered a proportionate lessening of the diameter of the flat disk attached to the distal end of the rod. Instead of the usual rubber cap, a small rubber band is made to stretch across the aperture of the base parallel to the groove. As noted above, the base can be removed at will, and the old base reapplied, for the purpose of taking those tracings for which it is fitted.

It is claimed for the modification, greater ease and rapidity of application of the instrument, and greater uniformity and clearness in the tracings. In order to more fully substantiate these claims the following illustrations of tracings, both by the old and the modified instruments, are presented:



Tracings 1 and 2, 3 and 4, 5 and 6, 18 and 23, were taken from the same individuals respectively. The persons from whom the tracings were secured were all under medical care, with symptoms of deranged circulation, save in the instance of Nos. 18 and 23. In order to correctly appre-

ciate the tracings, one should have a distinct idea of a true tracing. By a true tracing is meant one that graphically represents the action of vessel and contents, whether it (the tracing) be normal or abnormal.

The writer can substantiate the statement of Dr. Mateer, who says a normal tracing, as taken by the Pond instrument, should consist of an up-stroke, departing 10° to 15° from a perpendicular, an acute apex, and a descent at an angle of about 45° ; the descent is marked by two secondary waves of almost equal size, and the general trend of the descent is a slightly curved line, with its convexity downwards. Comparing the tracing so delineated (No. 23) with tracings by a Marey sphygmograph, one sees as much contrast as in a comparison between the "old and new base" tracings. This difference is worthy of explanation just here, in order to facilitate comparative study of tracings taken in similar forms of disease. The two forms of sphygmograph above mentioned represented two classes of instruments, and their work may therefore be compared. The lever, which is moved by the pulse, is restrained by a spring, and follows closely the movements of the vessel. The intervening rubber membrane follows the subsiding vessel in the "Pond," leaving the recording needle free to the influence of inertia. On account of this inertia, a greater height is given to the tracing, and the secondary waves are more distinctly brought out. As shown by Mateer, this same inertia causes the acute apex in the "Pond" tracing, the obtuse in the "Marey." Any one comparing tracings of these instruments, will see the uniformity of tracing and the distinctness of outline of the former as compared with those of the latter. It is, indeed, rather marvellous to be able to read correctly the ill-defined and irregular tracing of the Marey machine.

In conclusion, it seems not unbecoming to speak of the methods of ready use of the sphygmograph, and first regarding the wrist rest. Office work often will not permit one to delay long in arranging position, etc., and the writer has found that as good tracings can be secured without resort to this delay, and especially the discomfort of the patient, without the special rest as with it. As to pressure, its importance seems to be exaggerated. With Mateer, the writer studied it carefully, and we found the following formula a safe guide, one much more arbitrary than is generally given. Always apply that amount of pressure which yields the greatest amplitude to the tracing. The gauge adjusted to Pond's instrument is absurd

for it measures the pressure of the entire instrument on the wrist, enormous often with the old base. The gauge should be adjusted to the central part, which is raised by the artery. Even then its utility is doubtful. Graduated pressure is used to secure the same amplitude to a tracing—say one-half inch. The difference in pressure necessary to accomplish this in a hard and soft pulse would be equalled or surpassed by the varying resistance of the tissues surrounding the vessel.

The rate of speed of this slide is of practical moment. It should be such that the length of the tracing, horizontally, will be equal to its height, thus permitting the fullest development of all its elements. A tracing taken with the proper care, indicated by this instrument, is very legible and easy of interpretation.

A word may be said as to the value of sphygmography. As clinical studies are not within the province of this paper, they will not be detailed; the conclusions that can be drawn from considerable experience will not be out of place, however. Briefly, they are to the effect that in the diagnosis and especially the prognosis of various diseases, it is of extreme value. Especially is this true in the settlement of mooted questions connected with high tension, and the high tension diathesis, and with heart disease in its various forms, particularly in the estimation of cardiac power. In the prognosis of fevers, the sphygmograph is also of value. But withal, this only can be said that its value is great to the individual operator alone. In securing tracings, which can only be done properly after long practice, the personal equation is a most important factor. One can learn his power and know of what value his own control of the instrument is to the result of a proper treatment, which he can utilize in his judgment of the meaning of it. To another this is unknown, hence they can not interpret tracings taken by others. Therefore, the writer believes that to the operator who forms judgments of a case, its power is invaluable and increases with his experience; while, save in the conclusions, the general profession can profit but little.

In conclusion, the writer ventures to express the conviction that the modification of Dr. Mater will be of inestimable service in popularizing this valuable instrument. He feels that the judgment of the profession will be that the claims which have been presented for it are not too extravagant, and that sphygmography is materially promoted by the addition.

3705 Powelton Avenue.

WORK OF WOMEN PHYSICIANS IN ASIA.

BY MARY H. STINSON, M. D.,
Of Norristown, Pa.

(Continued from page 617.)

Medical missions are auxiliaries, whose primary object is the salvation of souls. By their reputation for medical and surgical skill, they draw the populace after them, gain their confidence and lead them to say one to another, "You need not be afraid of these missionaries. They are your friends, and have come to do you good." Rev. Mr. Corbell said, "Every attempt to get hold of a new city failed until our medical missionaries first won the confidence of the people by healing or relieving them in cases where the skill of the native physician would not avail." Rev. E. A. Moule attributed his success largely to the hospital work under the care of his associate, Dr. Galt.

Women medical missionaries are sent to break down the hitherto impenetrable barrier of caste. The late Dr. Duff, than whom none better knew the peculiar condition of Hindoo women of the upper classes, when speaking of females having a knowledge of the science and practice of medicine, said, "Would to God we had such an agency ready for work! Soon would India be moved to its inmost recesses."

There are two distinct systems of medicine in India. The Yonani or Greek is practiced by all the Hindoo doctors, called baidis, which means medical science or philosophy. They are disciples of the school of Hippocrates, who taught the Greeks their system long before the Christian era. The Yonani has been modified by the older Aryan and the newer Arabic, introduced about 700 years ago by the Mohammedan conquest. These Mohammedan doctors are called "hakoom." "These old systems, full of error and superstition, live and thrive; they are fully believed and wrought into the domestic life of the people."

Women medical missionaries have to contend with both systems, and must have the utmost confidence in their own, and a supreme courage to practice it in the face of much opposition. All confess that the English doctor has marvelous skill in surgery. It is in this that the lady physician will find her widest field of usefulness, and become the greatest blessing to humanity.

During all the past years of missions, the ordained missionaries carried certain medicines when on their circuits, preaching in the villages and out-stations, and by the distribution of which they greatly increased their audiences. Their wives had miniature apothecary shops, and were

obliged not only to medicate their own family, the children of the schools or plantations, but to give medicine to all the sick who applied for it. Thus these mission wives learned the wants of the women and children by whom they were surrounded; also, that these ministrations secured them admission where even their teachers could not gain an entrance. Consequently, they were the first to feel that women physicians were a necessity for the completion of the missionary corps.

Native Christians, English-speaking government officers, merchants, and bankers, had grown somewhat into sympathy with mission projects, as evidenced when there was an effort made to provide a way to educate native women in medicine, by one of these men saying, "It would open the doors of the zenanas as nothing else could. Besides this, you would save thousands of lives that are now sacrificed through the ignorant and bad practice of native doctors."

Another offered to bear half the expenses of educating a class of women in midwifery and medicine, if the government would grant the other half. Application was made. The government officer was in favor of granting the funds, but "there was so much opposition by medical men," and so much inevitable delay, that the gentleman who made the application withdrew the papers, and became responsible himself for the requisite amount. A class of nine women (there were men also) was opened May 1, 1869, under the supervision of Rev. J. S. Humphrey, M. D., in Nynsee Tal. After a two years' course of study, four of this class passed a creditable examination, and received certificates of fitness to practice "ordinary surgery and medicine." Early in the same year, the Macedonian cry, "Come over and help us," was heard, in an urgent appeal to the Philadelphia branch of the "Woman's Missionary Society," to send "a full-fledged woman doctor" to the mission in Bareilly, India. Here some girls had been carefully taught, hoping that they might have a chance to study medicine. They had already acquired a fair knowledge of the English language, which was necessary, as there are no words in their vernacular corresponding to technical medical terms.

Miss Clara Swain, M. D., who graduated in March, 1869, in "The Woman's Medical College in Philadelphia," was recommended to and adopted by the "Woman's Union Foreign Missionary Society." But she being a member of the Methodist Episcopal church, and "The Woman's Missionary Society" of that church having just

been organized, Dr. Swain was transferred to its care, under which she sailed November 3, 1869, and arrived in Bareilly, India, on January 20, 1870. She was received with much joy by the mission, as a direct answer to their prayers of faith. Prominent intelligent gentlemen of the neighborhood called to welcome her. One, a native who spoke English very well, said, "We need lady physicians in India very much, and I have often spoken of it to my friends, but we did not know where to look for them; as our women are uneducated, they could not study medicine. But it seems the people of the West have thought of us, and helped to meet our necessity by sending you. Light has again dawned from America." Ah! how much that word America signifies to the oppressed.

Dr. Swain was called immediately to visit women and children of all classes in the community, having had in the first six weeks after her arrival 108 patients. She was at once connected with the orphanage, and on March 1, 1870, commenced teaching medicine to a class of sixteen girls and three married women. They studied well, and thirteen of this class, on April 10, 1873, received from an examining board, two of whom were civil surgeons, "certificates of practice in all ordinary diseases."

In Dr. Swain's first annual report, we find she prescribed at the mission house for 1,225 patients. In the houses of the patients, for 250. And she said, "The way continues to open to our work. We have been called to sixteen different zenanas."

Dispensary and hospital conveniences had become an absolute necessity. But where could suitable grounds be bought, and could the society at home furnish the necessary means? were questions that caused much anxiety. A Mohammedan, Prince of Rampore, forty miles distant, owned an estate of 42 acres, well adapted for hospital purposes, adjoining the mission property. But as he had been decidedly opposed to Christianity, they had no hopes that it could be purchased for any price. However, the Commissioner advised the missionaries to ask his highness upon what terms the property could be bought for a hospital for women and children. This they did in October, 1871. To their astonishment and joy, the Nawab said, "Take it, take it. I give it to you with pleasure for that purpose." This gift was worth at least \$15,000. A dispensary building was ready for use by May 10, 1873, and the hospital completed on January 1, 1874, at a cost of \$10,350, all of which was furnished by "The Woman's Foreign Missionary Society of the Meth-

odist Episcopal Church" except \$350, collected in India.

Dr. Swain was assisted in her medical work by some of those who had received the "certificates," and by native medical students. The dispensary cards were printed in Hindoo, Persian, and Roman Urdu characters. From the 10th of May, 1873, to the 31st of December the same year, 1,600 patients were treated in the new dispensary.

Dr. Swain, when speaking of the sick in the zenanas, said, "My heart is often encouraged by their eagerness to hear and to be taught. They beg for our books, and ask us to come every day." Morning prayer to their false gods and idols is the national custom of both the Hindoo and the Mohammedan.

During 1874, fifty new families called for professional services, and all desired to have a teacher. The number of dispensary patients exceeded 3,000, with 150 outdoor patients.

Dr. Swain's reports of her work read like medical fairy tales. A friend at the mission wrote: "The Lord has had the matter of women medical missions in his own hands from the beginning. Dr. Swain is a grand success."

This minutia of the first four years' work of a woman medical missionary, without any interest of incidents, must serve for the work of all following women medical missionaries in India. All had similar trials and successes, but not to the same extent. No other woman physician in India but Dr. Swain, has taught native women students in medicine.

If time permitted, I should like to tell you of the discussions in the conferences of the missionaries from year to year, so that you might realize how slowly even some of these men grew to know the importance of female education and women's medical missions.

Not until 1872 do we find women in these conferences with papers. But in the conference in Allahabad of that year, Mrs. Winters, the wife of a missionary in Delhi, read a paper on "Female Education," and Miss Brittan one on "Zenana Missions." In the course of her article, Mrs. Winters said: "I would venture to urge the conference not to discuss the question of missions to women, but to spend the time thus saved in silent prayer to God for money, women, and, above all, love."—"I beg the conference with one voice to appeal to America, Germany, and England for aid."—"We ask for the flower of the ladies' colleges, the best nurses from the hospitals, the most devout sisters of mercy from the penitentiaries."—"We ask not an army of zenana teachers; the

best missionaries I have known have been Eurasians (Anglo-Indians) and natives. Why should we despise the workers God has put ready to our hands? We want from home a few picked women who will take the higher subjects, and train these nurses, and deepen their spiritual life."—"I left Bengal, after a four years' work, with an intense love for the Bengali women, and with the conviction that with Christianity they would become equal to the best cultivated women in the world."

Miss Brittan, in closing her address, said: "I believe the work among the women in India to be the most important mission work in India. The men had to be educated up to a certain point before they would permit their women to be taught; but now since that has been done, they are anxious to bring their women up to themselves. Depressed, debauched, and degraded as woman is here, she is an almighty power for evil. The influence of the wife is little; that of the mother, unbounded; and as long as that is only for evil, what hope can there be for the youth of India?"

At the same conference, in 1872, there were read two papers on medical missions by Rev. J. S. Humphreys, M. D., and Colin Valentine, Esq., M. D. Female doctors were discussed for the first time in conference in India. In answer to supposed impossibilities, Dr. Humphrey said: "It has been demonstrated beyond a doubt that we can educate the women even, and when educated, they may become useful and efficient practitioners."—"We need something like what is required at home, to make physicians and surgeons"—"in case of both men and women."

Dr. Valentine said: "When I first drew up this scheme for a medical missionary training institution a few years ago, there was not a single female medical missionary in India."—"No provision was made for female students. Now, however, there are female medical missionaries in the country, with a prospect of a large accession to their numbers. I would propose to the conference that the opening of female classes form part of our scheme."

Eleven years after this proposition of Dr. Valentine, we find in a Calcutta newspaper, the *Indian Witness*, of October 27, 1883, the following communication: "As there is a demand for medical Zenana workers in Northern India, it may prove an item of interest to some that the government has opened the Agra Medical School to women. A small class of native women are now in attendance. These are supplied with scholarships from the government; and under certain conditions, private female students may have ac-

cess to all the lectures, and after a course of three years, may be graduated. It should also be known that the Agra Medical Missionary Training Institution, organized through the efforts of Rev. Dr. Colin Valentine, proposes to provide scholarships for native students, male and female, who may wish to pursue a medical course in Agra. Further, the Rev. J. M. Reed, D. D., Secretary to the Missionary Society of the M. E. Church, U. S. A., proposes to be come responsible, as far as necessary, for Methodist native students, and these of either sex, who have been properly recommended may, in connection with this institution, come to Agra to attend the Medical School. We have to thank Mr. H. Dear, of Monghyr, and other gentlemen, for scholarships supporting several lads in attendance at the Medical School. But we urgently need additional funds to be used as scholarships for native Christian students of either sex who may wish to gain a medical education, and for whose maintenance no provision has been made. The new year in the Agra Medical School begins on the 1st of June, 1884."—"It is thought that scholarships for girls should be ten rupees per month, which would pay, not only for their books, clothes, and food, but also for a matron to accompany them to and from the lectures. Scholarships for the boys should be eight rupees monthly."

Rev. Dr. Scudder, M. D., in the conference of 1872, said: "I wish to add my testimony to the great value of medical missions as an evangelizing agency. I come from a medical stock, and therefore feel as if I had a right to speak in the matter. My father labored as missionary physician in India for thirty-five years, and bore testimony to the value of the medical work, regarding it as one of the best means of reaching the people. My own experience, too, extending over a period of seventeen years, is to the same effect."—"I should like to say just a word about this new movement, the introduction of medical ladies into missionary work. I am very glad to see it, and at the same time sorry to refer to the manner in which the medical students in the University of Pennsylvania and in Edinburgh disgraced themselves by their opposition to lady students. It is gratifying to know that this has been overthrown, and that the ladies are taking the place they deserve to occupy."—"They can enter into families where male physicians are forbidden access. I do not mean to say that the latter are entirely excluded; but, on the other hand, there are many cases in which native women would rather die than admit a male physician."

(To be continued.)

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

(Continued from page 622.)

In the cases of *chronic meningeal syphilis* which have come under my observation, most usually after a greater or less continuance of prodromes, such as have been mentioned, epileptic attacks have occurred with a hemiplegia, or a monoplegia, which is almost invariably incomplete, and usually progressive; very frequently diplopia is manifested before the epilepsy, and on careful examination is found to be due to weakness of some of the ocular muscles. Not rarely oculo-motor palsy is an early and pronounced symptom, and a marked paralytic squint is very common. Along with the development of these symptoms, there is almost always distinct failure of the general health, and progressive intellectual deterioration, as shown by loss of memory, failure of the power to fix the attention, mental bewilderment, and, perhaps, aphasia. If the case convalesce under treatment, the amelioration is gradual, the patient traveling slowly up the road he has come down. If the case end fatally, it is usually by a gradual sinking into complete nerve paralysis, or the patient is carried off by an acute inflammatory exacerbation, or, as I saw in one case, amelioration may be rapidly occurring, and a very violent epileptic fit produce a sudden asphyxia. In this form of cerebral syphilis, death from brain-softening around the tumor is not infrequent; but a fatal apoplectic hemorrhage is rare.

The clinical varieties of cerebral meningeal syphilis are so polymorphic and kaleidoscopic, that it is almost impossible to reduce them to order for descriptive purposes. Prof. Fournier separates them into the cephalic, congestive, epileptic, aphasic, mental, and paralytic, but scarcely facilitates description by so doing. Heubner makes the following types:

"1. Psychical disturbances, with epilepsy, incomplete paralysis (seldom of the cranial nerves), and a final comatose condition, usually of short duration.

"2. Genuine apoplectic attacks with succeeding hemiplegia, in connection with peculiar somnolent conditions, occurring in often-repeated episodes; frequently phenomena of unilateral irritation, and generally at the same time paralyzes of the cerebral nerves.

"3. Course of the cerebral disease similar to paralytica dementia."

In regard to these types, the latter seems to me clear and well-defined, but contains those cases which I shall discuss under the head of cortical disease.

Meningeal syphilis as seen in this country does not conform rigidly with the other asserted types, although there is this much of agreement, that when the epilepsy is pronounced, the basal cranial nerves are not usually paralyzed; the reason of this being that epilepsy is especially produced when the gummatous change is in the ventricles or on the upper cortex. In basal affections, the epileptoid spells, if they occur at all, are usually

of the form of petit mal; but this rule is general, not absolute. The apoplectic somnolent form of cerebral syphilis, for some reason, is rare in this city; and it seems necessary to add to those of Prof. Heubner's, a fourth type to which a large proportion of our cases conform. This type I would characterize as follows:

4. Psychological disturbance without complete epileptic convulsions, associated with palsy of the basal nerves, and often with partial hemiplegia.

The most satisfactory way of approaching this subject is, however, to study the important symptoms in severally, rather than to attempt to group them so as to make typical, recognizable varieties of the disease; and this method I shall here adopt.

Headache is the most constant and usually the earliest symptom of meningeal syphilis; but it may be absent, especially when the lesion is located in the reflexions of the meninges which dip into the ventricles, or when the basal ganglia is small and not surrounded with much inflammation. The length of time it may continue without the development of other distinct symptoms is remarkable. In one case (Book Y, p. 88, 1879), at the University Dispensary, the patient affirmed that he had had it for four years before other causes of complaint appeared. It sometimes disappears when other manifestations develop. It varies almost indefinitely in its type, but is, except in very rare cases, at least so far paroxysmal as to be subject to pronounced exacerbations. In most instances it is entirely paroxysmal; and a curious circumstance is, that very often these paroxysms may occur only at long intervals; such distant paroxysms are usually very severe, and are often accompanied by dizziness, sick stomach, partial unconsciousness, or even by more marked congestive symptoms. The pain may seem to fill the whole cranium, may be located in a cerebral region, or fixed in a very limited spot. Heubner asserts that when this headache can be localized, it is generally made distinctly worse by pressure at certain points, but my own experience is hardly in accord with this. Any such soreness plainly cannot directly depend upon the cerebral lesion, but must be a reflex phenomenon, or due to a neuritis. According to my own experience, localized soreness indicates an affection of the bone or of its periosteum. In many cases, especially when the headache is persistent, there are distinct nocturnal exacerbations.

It will be seen that there is nothing absolutely characteristic in the headache of cerebral syphilis; but excessive persistency, apparent causelessness, and a tendency to nocturnal exacerbation, should in any cephalalgia excite suspicion of a specific origin; a suspicion which is always to be increased by the occurrence of slight spells of giddiness, or by delirious mental wandering accompanying the paroxysms of pain. When an acute inflammatory attack supervenes upon a specific meningeal disease, it is usually ushered in by a headache of intolerable severity.

When the headache in any case is habitually very constant and severe, the disease is probably in the dura mater or periosteum; and this probability is much increased if the pain be local and augmented by firm, hard pressure upon the skull over the seat of the pain.

Disorders of Sleep.—There are two antagonistic

disorders of sleep, either of which may occur in cerebral syphilis, but which have only been present in a small proportion of the cases that I have seen. Insomnia is more apt to be troublesome in the prodromic than in the later stages, and is only of significance when combined with other more characteristic symptoms. A peculiar somnolence is of much more determinate import. This may occur in non-specific lepto-meningitis, and in states of altered brain nutrition from senile or other degenerations of the walls of the cerebral vessels, and is, therefore, not pathognomonic of cerebral syphilis, yet of all the single phenomena of the latter disease it is the most characteristic. Its absence is of no import in the theory of an individual case.

As I have seen it, it occurs in two forms: In the one variety the patient sits all day long or lies in bed in a state of semi-stupor, indifferent to everything, but capable of being aroused, answering questions slowly, imperfectly, and without complaint, but in an instant dropping off again into his quietude. In the other variety, the sufferer may still be able to work, but often falls asleep while at his tasks, and especially towards evening has an irresistible desire to slumber, which leads him to pass, it may be, half of his time in sleep. This state of partial sleep may precede that of the more continuous stupor, or may pass off when an attack of hemiplegia seems to divert the symptoms. The mental phenomena in the more severe cases of somnolency are peculiar. The patient can be aroused, indeed in many instances he exists in a state of torpor rather than of sleep; when stirred up he thinks with extreme slowness, and may appear to have a form of aphasia; yet, at intervals he may be endowed with a peculiar automatic activity, especially at night. Getting out of bed; wandering aimlessly and seemingly without knowledge of where he is, and unable to find his own bed; passing his excretions in a corner of the room, or in other similar place, not because he is unable to control his bladder and bowels, but because he believes that he is in a proper place for such act—he seems a restless automaton, rather than a man.

Apathy and indifference are the characteristics of this state, and yet the patient will sometimes show excessive irritability when aroused, and will at other periods complain bitterly of pain in his head, or will groan as though suffering severely in the midst of his stupor, at a time, too, when he is not able to recognize the seat of the pain. I have seen a man with a vacant apathetic face, almost complete aphasia, persistent heaviness and stupor, arouse himself when the stir in the ward told him that the attending physician was present, and come forward in a dazed, highly pathetic manner, by signs and broken utterance begging for something to relieve his head. Heubner speaks of cases in which the irritability was such that the patient fought vigorously when aroused; this I have not seen.

This somnolent condition may last many weeks. Dr. T. Buzzard (*Clinical Lectures on Dis. Nerv. Syst.*, London, 1882,) details the case of a man who, after a specific hemiplegia, lay silent and somnolent for a month, and yet finally recovered so completely as to win a rowing match on the Thames.

In its excessive development, syphilitic stupor puts on the symptoms of advanced brain softening, to which it is indeed often due. Of the two cases with fatal result of which I have notes, one at the autopsy was found to have symmetrical purulent breaking-down of the anterior cerebral lobes; the other, softening of the right frontal and temporal lobes due to the pressure of a gummatous tumor, and ending in a fatal apoplexy.

This close connection with cerebral softening explains the clinical fact that apoplectic hemorrhage is very apt to end the life in these cases of somnolent syphilis. Dr. Buzzard's case given above, and others which might be cited, prove, however, that a prolonged deep stupor in persons suffering from cerebral syphilis does not prove the existence of extensive brain softening, and is not incompatible with subsequent complete recovery. As an element of prognosis, it is of serious but not of fatal import.

Paralysis.—When it is remembered that a syphilitic exudation may appear at almost any position in the brain, that spots of encephalic softening are not a rare result of the infection, that syphilitic disease is a common cause of cerebral hemorrhage—it is plain that a specific palsy may be of any conceivable variety, and affect either the sensory, motor, or intellectual sphere. The mode of onset is as various as the character of the palsy. The attack may be instantaneous, sudden, or gradual. The gradual development of the syphilitic gumma would lead us, *à priori*, to expect an equally gradual development of the palsy; but experience shows that in a large proportion of the cases the palsy develops suddenly, with or without the occurrence of an apoplectic or epileptic fit. Under these circumstances it will be usually noted that the resulting palsy is incomplete; in rare instances it may be at its worst when the patient awakes from the apoplectic seizure, but mostly it progressively increases for a few hours, and then becomes stationary. These sudden partial palsies probably result from an intense congestion around the seat of disease, or from stoppage of the circulation in the same locality; but whatever their mechanism may be, it is important to distinguish them from palsies which are due to hemorrhage. I believe this can usually be done by noting the degree of paralysis.

A suddenly developed, *complete* hemiplegia, or other paralysis, may be considered as in all probability either hemorrhagic or produced by a thrombosis so large that the results will be disorganization of the brain substance, and a future no more hopeful than that of a clot. On the other hand, an *incomplete* palsy may be rationally believed to be due to pressure or other removable cause, and this belief is much strengthened by a gradual development. The bearing of these facts upon prognosis it is scarcely necessary to point out.

Although the gumme may develop at almost any point, they especially affect the base of the brain, and are prone to involve the nerves which issue from it. Morbid exudations, not tubercular nor syphilitic, are very rare in this region. Hence a rapidly but not abruptly appearing strabismus, ptosis, dilated pupil, or any paralytic eye symptom in the adult, is usually of syphilitic nature. Syphilitic facial palsy is not so frequent, whilst

paralyses of the nerve from rheumatic and other inflammation within its bony canal are very common. Paralysis of the facial may therefore be specific, but it is of no diagnostic value. Since syphilitic palsies about the head are in most instances due to pressure upon the nerve trunks, the electrical reactions of degeneration are present in the affected muscles.

There is one peculiarity about specific palsies which has already been alluded to as frequently present—namely, a temporary, transient, fugitive, varying character and seat. Thus an arm may be weak to-day, strong to-morrow, and the next day feeble again; or the recovered arm may retain its power, and a leg fail in its stead. These transient palsies are much more apt to involve large than small brain territories. The explanation of their largeness, fugitiveness, and incompleteness, is that they are not directly due to clots or other structural changes, but to congestions of the brain tissues in the neighborhood of gummatous exudations. It is easily seen why a squint will remain when the accompanying monoplegia disappears.

Motor palsies are more frequent than sensory affections in syphilis, but hemianæsthesia, localized anæsthetic tracts, indeed any form of sensory paralysis, may occur. Numbness, formications, all varieties of paræsthesia are frequently felt in the face, body, or extremities. Violent peripheral neuralgic pains are rare, and generally when present denote neuritis. Prof. Huguenin, however, reports (*Schwiez. Corr. Blat.*, 1875,) a case in which a severe trigeminal anæsthesia dolorosa had existed during life, as the only cerebral symptom, and death occurring from lung disease, a small gumma was found on the sella turcica pressing upon the Gasserian ganglion.

The special senses are liable to suffer from the invasion of their territories by cerebral syphilis, and the resulting palsies follow courses and have clinical histories parallel to those of the motor sphere. The onset may be sudden or gradual, the result temporary or permanent. Dr. Chas. Mauriac (*loc. cit.*, p. 31) reports a case in which the patient was frequently seized with sudden attacks of severe frontal pain and complete blindness, lasting from a quarter to half an hour; at other times the same patient had spells of aphasia lasting only for one or two minutes. In a case still under my care with unmistakable signs of cerebral syphilis, the man was suddenly and unaccountably seized with complete deafness, which after some days disappeared in the course of a few hours. Like other syphilitic palsies, therefore, paralyses of special senses may come on suddenly or gradually, and may occur paroxysmally.

Among the palsies of cerebral syphilis must be ranked aphasia. An examination of recorded cases shows that it is subject to vagaries and laws similar to those connected with other specific cerebral palsies. It is usually a symptom of advanced disease, but may certainly develop as one of the first evidences of cerebral syphilis.

Coming on after an apoplectic or epileptic fit, it may be complete or incomplete: owing to the smallness of the centre involved, and the ease with which its function is held in abeyance, a total loss of word thought is not so decisive as to the existence of cerebral hemorrhage as is a total

motor palsy. Like hemiplegia or monoplegia, specific aphasia is sometimes transitory and paroxysmal. Dr. Buzzard (*loc. cit.*, p. 81) records several such cases. Dr. Charles Mauriac (*Aphasie et Hémiplegie droite Syphilit.*, Paris, 1877,) details a very curious case in which a patient after long suffering from headache was seized by a sudden loss of power in the right hand and fingers, lasting about ten minutes only, but recurring many times a day. After this had continued for some alytic and were accompanied by loss of power of finding words, the height of the crises in the palsy and aphasia being simultaneously reached. For a whole month these attacks occurred five or six times a day, without other symptoms except headache, and then the patient became persistently paralytic and aphasic, but finally recovered.

To describe the different forms of specific aphasia and their mechanism of production, would be to enter upon a discussion of aphasia itself, a discussion out of place here. Suffice to say that every conceivable form of the disorder may be induced by syphilis.

Owing to the centres of speech being situated in the cortical portion of the brain, aphasia in cerebral syphilis is very frequently associated with epilepsy. Of course, right-sided palsy and aphasia are united in syphilitic as in other disorders. If, however, the statistics given by M. Tanowsky (*L'Aphasie Syphilitique*) be reliable, syphilitic aphasia is associated with left-sided hemiplegia in a most extraordinarily large proportion. Thus in 53 cases collected by Mr. Tanowsky, 18 times was there right-sided hemiplegia, and 14 times left-sided hemiplegia, the other cases being not at all hemiplegic. Judging from the autopsy on a case reported in Mauriac's brochure, this concurrence of left-sided paralysis and aphasia depends partly upon the great frequency of multiple brain lesions in syphilis, and partly upon the habitual involvement of large territories of the gray matter secondarily to diseased membrane. An important practical deduction is that the conjoint existence of left hemiplegia, and aphasia is almost diagnostic of cerebral syphilis.

(To be Continued.)

EDITORIAL DEPARTMENT.

PERISCOPE.

An Operation for Hallux Valgus.

Dr. Arthur E. Barker thus writes in the *Lancet*, April 12, 1884:

The deformity hallux valgus is one for which it will probably be admitted a cutting operation is rarely demanded. In the first place, the condition being one due in almost every case to ill-fitting boots, which force the great toe out of the line of its metatarsal bone into strong abduction, it is possible by proper attention to the shoeing of the patient, by methodical manipulation of the faulty toe, and by placing pads between the latter and its neighbors, to bring it in most cases into a fairly comfortable position once more. Still every surgeon must meet from time to time with cases of this deformity which baffle all ordinary endeavors to bring about even a tolerable state of things, and where the great toe lying crosswise, either under or over its fellow, gives rise to such inconvenience, if not actual suffering, as practically to cripple the individual so affected. Under these circumstances patients are willing to undergo any treatment in order to be relieved, and will even urge the surgeon to amputate the offending member, which is interfering with all comfort in progression.

The following case will illustrate remarkably well the evils of this condition, and will serve also for the demonstration of a simple operation which was practiced with perfect success for its cure.

X—, aged nineteen, was brought to me as an out-patient in November, 1882. He complained much of being crippled by the deformity of his toes. I found both feet to present the deformity in question acutely, but most marked on the right

side, where the nail of the great toe lay under its fellow, its matrix being in a state of suppuration from the pressure and irritation, and the parts exquisitely tender. Various measures had been tried before I saw the patient to relieve him, attention being particularly directed to the inflamed matrix and ingrown nail. I did not anticipate much difficulty in relieving the patient, and treated him by cutting out the imbedded portion of nail and dressing the ulcerating surfaces with antiseptic materials placed thickly between the toes. This, however, proved of no permanent benefit to the patient, for on trying to walk the great toe always reassumed its vicious position under that next it, and the ulceration commenced as before. Finally, after a long treatment, the patient's father and a friend came to me and urged me to take stronger measures, and if necessary remove the toe, as the youth had been thrown out of work and was unable to take any exercise for a long time. I was of course averse to amputation of the member, though it was only an encumbrance, and began to review for the students present all the measures which have from time to time been resorted to for improving the deformity. In doing so I was dwelling on the question of excision of the metatarsal phalangeal joint recommended by some, when one of our students, Mr. C. Hoar, asked me if the condition was ever relieved by osteotomy of the metatarsal bone, and straightening of the toe thus without interfering with the joint at all, as he had often seen me operate for genu valgum. I told him that I did not think it had been done hitherto, but that the idea seemed such a good one that we should put it in practice in this case at once. The patient and his father accepting the proposal to do so with great readiness, I performed the following simple operation with the strictest Listerian antiseptic

precautions. Having first made an incision through the soft parts about an inch long, on the inner aspect of the metatarsal bone, above its head, I cut out with a chisel a small wedge-shaped piece of bone from the shaft just above the head, the base of the wedge being on the inner surface of the bone, and the apex at a point nearly through to the other side. Then, by forcibly abducting the great toe, I snapped the uncut remainder of the metatarsal bone, and brought the whole member into a straight line. In this position it was easily retained by a narrow splint along the inner border of the foot. The wound was dressed antiseptically, and the patient was allowed to go home at once. But little remains to be said about the case. The wound was left undisturbed for ten days, and was then found practically healed and without suppuration. The splint was, however, left on for a few days longer, after which, as the bone had united in its straight position, the patient was allowed to return to work, which he was soon engaged in as actively as ever. I have seen him several times since at intervals (yesterday, Feb. 18th, 1884, for the last time, *i. e.*, over two years after operation), and the toe is almost quite straight, although a little bent by a bad-fitting boot since worn. He is quite relieved of all the troubles incidental to this deformity.

It will be observed from the above short description, that this simple operation is almost the same as that we are in the habit of performing for genu valgum. Here, however, I thought it better to remove a small wedge of bone, instead of simply dividing the part transversely, as in the case of the knee. I imagined there might otherwise be some difficulty in bringing the parts into position, remembering the short leverage of the toe as compared with that of the tibia. The course of the healing process was as completely satisfactory as those osteotomies usually are under the antiseptic treatment of wounds. It was without suppuration, pain, or fever. The toe has been a little stiff since, as might be expected; but the patient does not wish any forcible flexion of it, as the stiffness gives him no inconvenience.

I have purposely avoided going into minute details of this operation. Its principles and practice must be perfectly clear to any one familiar with osteotomy for genu valgum, now so commonly practiced. It is quite simple and free from risk, if performed with strict antiseptic precautions: and though not often called for, still I cannot help thinking that there is a useful place for it in surgery.

This little operation may have been done before, but I cannot find any record of such a procedure. If it be original in this case, the merit of the suggestion lies with one of our students at University College Hospital.

The German Cholera Commission.

The *Brit. Med. Jour.*, April 12, 1884, furnishes us the following in reference to Dr. Koch's latest report:

The "Seventh Report of the German Cholera Commission," dated Calcutta, March 4, recently published in Berlin, is a document of no small importance, as it supplies evidence on the ques-

tion of the mode of origin of epidemics, and the method of propagation.

The evidence distinctly supports the theory that cholera is spread by a water-borne contagion. The report deals chiefly with the occurrence of small local epidemics of cholera in the neighborhood of "tanks." These "tanks," which are scattered over the whole country in vast numbers, are, in reality, small ponds, often in marshy ground, surrounded by a few huts. The inhabitants use the water of the tank for every purpose, washing, bathing, and drinking, and latrines of a very primitive design are frequently erected on the banks and drain into the "tank." The water of these tanks is, of course, under these circumstances, highly charged with foul organic matter; and it is said to be within the experience of all who have seen much of cholera, that local epidemics occur with considerable frequency in the neighborhood of these tanks. The Sanitary Commissioner of the government, having been applied to by Dr. Koch, was able in the end of February to direct his attention to Saheb Bagan, a suburb of Calcutta, where such a local epidemic was in progress; it was entirely limited to the inhabitants, about one hundred in number, of huts built around the pond. Seventeen deaths from cholera occurred among these hundred persons, though during the same period, in the other parts of the police district in which the tank is situated, no cases of cholera were reported. It was ascertained that the water of the "tank" had served the inhabitants for purposes of bathing, washing, and drinking, and that the linen of the first fatal case of cholera, smirched with the dejections, was washed in this "tank." Samples of water were taken from different parts of the pond and examined by the method of cultivation on gelatine. It was found that the first samples were rather rich in the cholera-bacillus, whereas of those obtained at a later period, and near the termination of the epidemic, the characteristic bacillus was only found, in very small numbers, in one sample taken from a very dirty part of the pond. This was the only instance which could be examined, but Dr. Koch contends that it affords strong evidence of one of the ways by which the poison of cholera finds its way into the human body.

The examination of cholera-dejections, and of the bodies of persons who had died of cholera, had been continued by the Commission; and the results obtained had confirmed, without extending or otherwise modifying, those previously published.

Experiments have been made by the Commission to ascertain the influence of disinfectants, such as corrosive sublimate and carbolic acid, on the growth of the bacillus in culture fluids, and also the results of cultivation in an atmosphere of carbonic acid gas, and in a closed chamber.

No definite results have as yet been obtained with regard to the question of the conditions under which the bacillus can retain its vitality. It does not seem to be able to preserve its vitality when dried, but if kept moist it can be preserved for a long time. In liquids it can maintain its vitality for several weeks, and Dr. Koch thinks that all the evidence tends to show that the infection can only be introduced into the human body in a moist state.

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THE NEW FEBRIFUGE—KAIRIN.

The reports of the remarkable antipyretic effect of kairin continue to augment. Most observers seem to agree that it is best to begin in adults with a dose of about $12\frac{1}{2}$ grains, to repeat this two hours later, then to administer 9 grains every two to three hours, until the desired effect—decrease of temperature—has been obtained, when a smaller dose, about 5 grains, employed every three hours, usually suffices to keep down the temperature. But at the least indication of the temperature falling below normal, the remedy must either be omitted or given in small doses and at very long intervals, say 3 grains every twelve hours. Should, however, the temperature nevertheless again ascend, the same course as described must be gone through anew.

At a recent meeting of the society for gynecology in Leipsic (*Allgen. Med. Centr. Zeit.*, 1884, 1), Dr. Hennig reported on the effect of kairin in parturient women and in children. He had employed the new drug in three cases of women in childbirth, dangerously ill. Patient had been confined to bed for six weeks. She suffered, aside from the puerperal fever, from a bed-sore of the size of a child's hand, and penetrating to the periosteum of the sacrum. The second patient became attacked in the second week of childbed by peri- and para-metritis dextra, perforating later into the rectum; chronic pneumonia also became added; there was inclination to tetanus; and frequent vomiting, besides anæmia in a high degree, were other complicating phenomena. The third evinced typhoid symptoms and diarrhœa lasting three days. The children were suffering, one from scarlatina; one from diphtheria, with high fever; and one with laryngeal stenosis, necessitating tracheotomy.

In all these five cases the kairin was administered after all the well-known and usually considered effective febrifuges (quinine, salicylate of sodium, application of cold, and especially baths), had proven themselves incapable of reducing the fever from its height (41.6° to 42.4° C.). The decrease of temperature promptly took place in all five cases, and amounted in the adults to 2°

C., and in the children (æ. 2 to 3) 1° to 1.8° C.

The antipyretic effect of kairin has been demonstrated not only to come up to the expectations of its discoverer, but also to surpass them; for all these five persons, in whom the prognoses had been so grave as to induce the physicians attending them, ere Hennig saw them, to consider them beyond all hope, and still they were free from fever, the operated boy after recovering from a grave form of bronchitis. Intense (black-green) discoloration of the kairin urine was observed only in two of the women; the third reported as the next visible effect of the kairin, cessation of all pains.

NEWS AND MISCELLANY.

Pennsylvania State Medical Society.

(Concluded from page 639.)

Then followed the Address in Obstetrics, by Dr. Jacob Price, of West Chester, which began with a reference to the remarkable rapidity with which the present advanced condition of obstetrics has been reached. "A hundred years ago it was not recognized in the curriculum of the medical college. The first medical school in this country, established in Philadelphia in 1765, contained no provision for the study of obstetrics. After some time it was attached to the chair of anatomy, and thereby fortunately came into the hands of Dr. Wm. Shippen, who by his previous careful training under Smellie and Wm. Hunter, was peculiarly fitted to teach this new branch of medical science and extend its interest. Aided by Drs. Bond, Duffield, and James, Dr. Shippen succeeded in establishing a lying-in hospital, with clinical lectures upon midwifery in connection with it."

"It was not, however, until 1810 that the chair of obstetrics in the University of Pennsylvania was separated from that of anatomy; and even at this date the ban of the profession rested so heavily upon it that not until 1813 was attendance upon the obstetrical course made a requisite for graduation."

Reference is made to the advanced condition of obstetrics and gynecology, as shown by the translators of the works of Oribasius and Cælius, presented by Prof. Maughs, of St. Louis, at the meeting of the American Medical Association in 1883. The pernicious vomiting of pregnancy is a trouble to which Dr. Price seems to have given special attention; and as his points are somewhat new, and the results in treatment most satisfactory, we give his discussion of it in full.

Perhaps the first trouble for which the pregnant female seeks the counsel of her medical adviser is the sick stomach that usually attends the early months of utero-gestation. This, by the laity and by too many physicians, is looked upon as a trifling affair, and receives but little attention. Fortunately in the vast majority of cases it is not

serious, and yields to remedies addressed to the stomach itself. But sometimes all such treatment fails to give relief—the symptoms grow steadily worse. It is no longer a morning sickness. Nearly all food is rejected—emaciation and loss of strength steadily progress. The nervous symptoms deepen—evidences of inanition become pressing. The routine practice of the books fails to stem the downward tendency. The induction of premature labor, with all its dangers, is taught and accepted as a necessity to avert death from inanition. Early in my practice two such cases came under my notice, one of them in my own practice. Both proved fatal—my own case after the induction of abortion. The study of the subject induced by these unfortunate cases, established the fact that not one of the systematic works upon obstetrics to which I could gain access, gave any well-defined views as to the pathology of this most serious malady, or any treatment except palliative medication, evidently of a routine character, all of which, in these grave and protracted cases, experience proved totally unreliable. Step by step I reached the conclusion that in these unmanageable cases of vomiting during pregnancy—"pernicious vomiting," as it has recently been designated—there was present congestion or inflammation of the uterine cervix. In no case did examination fail to disclose the presence of local disease of this character, and treatment based upon this view proved eminently satisfactory.

In a paper upon the subject which I had the honor to read at the meeting of this society in Lancaster, in May, 1881, I embodied these conclusions in regard to the pathological condition present in this disease—detailed the steps of treatment I had found prompt in affording relief, and reported several illustrative cases. My paper was severely attacked, upon theoretical grounds alone, but I had the satisfaction of finding it warmly defended and thoroughly sustained by the practical men present, those whose daily work led them to the bedside of the sick and suffering.

Since 1881 five cases of "pernicious vomiting" have come under my own notice, and several more under the care of physicians with whom I have corresponded, and in no one has treatment, local and general, based upon the foregoing pathological views, failed to afford relief. I will give briefly three cases of my own, and four in the practice of other physicians.

The first was in one of the patients named in my former paper. A subsequent pregnancy was attended by the same extreme symptoms. Remembering the relief in her former trouble, she sought treatment before the emaciation and nervous prostration had made much progress. She soon recovered. I will here state the points of treatment: Relief of constipation, if present, by effervescing saline; rest in bed; emollient vaginal injections, and applications at intervals of three days of a solution of iodine, crystalized carbolic acid and tannin, each two drachms, dissolved by heat in an ounce of pure glycerine: in some cases I add morphia and atropia; a vaginal tampon of absorbent cotton saturated with pure glycerine, and followed by a dry one, is placed at each treatment. Usually not more than three or four of these applications are required.

The second case was the wife of a prominent physician of this city. I will let her husband give the case in his own words:

"My wife was operated upon for lacerated cervix, by Dr. A. H. Smith, in April, 1883. Her second pregnancy began in June following. In July extreme and incessant vomiting came on. All ordinary, in fact all known remedies, were tried, but nothing proved of any avail. Toward the latter part of August you took charge of the case, at which time I considered her condition very critical, and had grave doubts of the possibility of carrying her through the gestation safely. The speculum revealed a generally congested and livid appearance of the whole uterine neck, with leucorrhœal discharge, coming evidently from the cavity of the cervix. A careful application of your modified Battey's solution was made to the os and neck of the uterus. Within twelve hours decided relief was manifested. These applications were repeated three times a week for three weeks, by which time her condition was so much improved that they were discontinued, except at intervals of some weeks, when there was slight return of sickness. Labor set in March 23. The first stage slow; second very rapid; recovery satisfactory; but recent examination discloses at least a partial reproduction of the laceration."

In commenting upon this case, I may say that the partial return of sickness was no doubt due to the too early discontinuance of the regular twice-weekly application. A private letter from the patient expressed in most grateful terms the prompt and complete relief she derived from the treatment.

My third case was also the wife of a physician. He wrote me that his wife, then in the fourth month of gestation, was extremely ill from uncontrollable vomiting. That in three former pregnancies she had suffered from sickness that resisted the usual remedies, but she was so much more ill now, that with his former experience of the inefficiency of medication he feared for her life, and was disposed to think abortion would soon be an absolute necessity. I suggested the treatment already described.

In three weeks he informed me that his wife had been entirely relieved by the rest and injections alone, and that she was attending to her household duties with entire comfort. I saw her three months later, quite well, and enthusiastic over the relief she had received from the simple yet most efficient treatment.

Dr. P. informed me that some weeks before writing me, in view of the necessity for removing the contents of the uterus, he had consulted a prominent teacher in obstetrics, and had received no suggestions beyond the routine medication of the books, all of which he had tried in this and her previous pregnancies without any good result. I mention this to illustrate how little thought and study this most serious and at times dangerous malady has received at the hands of those to whom we look as authority in all that pertains to obstetrics.

My neighbor, Dr. C. E. Woodward, has given me the notes of two cases, one aged 30—the fourth pregnancy in five years. He saw her first April 14, 1883, two months pregnant. There was constant nausea and vomiting, great anemia, and nervous depression amounting to melancholia.

She had profuse leucorrhœa and painful micturition. A vaginal examination disclosed a lacerated cervix. The os uteri was swollen, red, and sensitive to the touch, and with a profuse acrid discharge. I painted the os and cervix freely with a mixture of tr. of iodine, glycerine, and carbolic acid, morphia and atropia, and left a vaginal pad of cotton saturated with glycerine. These applications were made at intervals of four days for about a month, by which time the discharge had ceased, the evidence of congestion and inflammation of the os and cervix had passed away, and the sick stomach was entirely relieved. Two months later the complaint returned, and with it the evidence of local disease. A few applications removed the latter, and again the vomiting and other distressing symptoms disappeared.

Dr. Woodward's second case, a primipara. The vomiting came on early and resisted all medication. By the third month she was very much emaciated, and the prostration extreme. A vaginal examination disclosed a swollen and congested cervix, tender to the touch, which seemed immediately to increase the nausea. Applications were made as in the former case. A favorable impression was apparent after the first application, and by the fifth the relief was complete. There was no medication after the local treatment was begun.

Dr. Massey, also of West Chester, reports a case in which, after three months of sick stomach, resisting usual remedies, the use of warm vaginal injections, painting the cervix with comp. tr. of iodine and glycerine, and the vaginal pledget of cotton, saturated with pure glycerine, was followed by complete relief. In this case there was retroflexion, which was corrected by one of Smith's pessaries, the use of which was continued until the seventh month of gestation.

Dr. Boardman Reed, of Atlantic City, N. J., has kindly sent me the following case, which I give in his own words: "A lady pregnant for the third time complained of almost unremitting nausea and vomiting. She said that in her previous pregnancies she had suffered for months in a similar manner, and that medicines did her no good. I tried various remedies for her without avail, until about the end of the second month, when her sufferings were so great that she threatened to have an abortion produced. Emboldened by the experience of Dr. Price, as recorded in his paper on this subject read before the Medical Society of the State of Pennsylvania in 1881, I applied the comp. tr. iodine freely to the os and cervix uteri, which upon examination was found to be congested and tender. The relief from this distressing sickness was immediate and decided. A second application, made a week later, so far cured the trouble that the patient made very little complaint thereafter. No pain or bleeding followed the application."

Gentlemen, my apology for referring so much in detail to this subject, "the pernicious vomiting of pregnancy," is to be found in the conviction that has been forced upon me after long and careful study of it—that no disease so important in its bearing upon the comfort and safety of the patient has been so little studied, is so unsettled in its pathology, and the treatment of which has been so unsatisfactory. That it is often serious all must

admit. Guéniot (as quoted by Playfair) collected 118 cases of the graver form of the disease, out of which 46 died, and out of 72 that recovered, in 42 the symptoms ceased only when abortion either spontaneous or induced had occurred. That it has not received from systematic writers on obstetrics the study its importance demands, is very evident. A few paragraphs, reproducing a routine treatment, that repeated experience has shown inefficient, is all the space devoted to it by some claiming to be comprehensive.

Playfair alone, of all I have been able to consult, recognizes fully the gravity of the class of cases I have been discussing, and admits the unsatisfactory character of our knowledge, both of its pathology and treatment. He, as well as Leishman and Lusk, speaks of inflammation as a possible cause in some cases, but lays no stress whatever upon this view. I. Henry Bennett is the only author I have found who distinctly refers to "inflammatory ulceration of the cervix uteri" as a possible cause of obstinate vomiting in pregnancy.

A recent French writer, Dr. Suturgin, in "*Archives de Tocologie*," after elaborate study, draws the following conclusions: "That the symptoms are very analogous to those of inanition, which explains the decreased urinary secretion, and the presence of albumen and cylinders in the urine. That death takes place, either from exhaustion or from intercurrent puerperal disease or from diseases that have no direct relation to pregnancy, that the nature of the affection is still unknown, and finally, if therapeutic means fail (and none are pointed out) premature delivery must be resorted to."

Dr. Grailly Hewitt advanced the theory that the disease in question depends upon flexion of the uterus, producing irritation of the nerves at the seat of flexion and consequent sympathetic vomiting, but it received little favor when discussed by the London Obstetrical Society. My own observation disproves it entirely. I have met with several cases of flexion of uterus during the early months of pregnancy without serious sickness, and in no case of "pernicious vomiting" have I found it present. The generally received explanation is that the vomiting is due to the stretching and consequent irritation of the uterine nerves by the growing ovum. This is probably true so far as the slight morning sickness is concerned, but is totally inadequate to explain the grave form of the disease.

Horwitz, of St. Petersburg, has given, very recently, an elaborate paper upon the uncontrollable vomiting of pregnancy. In common with Guéniot, who adopts the term, "*Vomitus Gravidorum Perniciosus*," he draws the distinction sharply between this form of disease and the morning sickness of the early weeks of pregnancy. The former begins most frequently between the tenth and eleventh weeks. He discusses the various explanatory theories that have been proposed, but declares that none are satisfactory. The prognosis, he thinks, depends much upon the epoch of pregnancy in which the trouble appears. The nearer to the beginning the worse the prognosis, especially in the case of primiparæ. He quotes Joulin as giving the mortality at 44 per cent. As to treatment, he offers nothing new. In danger-

ous cases, in which life is threatened, artificial abortion becomes a necessity.

In concluding this subject, I am glad not to leave you with the unsettled and discouraging views which these distinguished writers have reached, but to state distinctly as the result of careful study of the disease, now extending over a period of many years, that the "pernicious vomiting of pregnancy" is dependent in a vast majority of cases upon congestion and inflammation of the lower segment of the uterus; and I here wish to assert so emphatically as to arrest the attention of every physician now present, that I know of no disease of equal gravity that so surely yields to established rules of treatment as this one does to treatment based upon the view of a congestive or inflammatory causation, viz., rest in bed, emollient and mildly astringent vaginal injections, the tepid sitz bath, and especially, in extreme cases, the topical application of Battey's or a similar sedative lotion to the uterine cervix. I am sure that no one who carefully and intelligently carries out this plan of treatment will fail to bring relief in the most obstinate case.

In discussing the treatment of cases of abortion, the address takes strong ground against immediate instrumental interference to remove the secundines, and reprobates the practice of some of the younger writers, who would make every miscarriage an excuse for scooping out the cavity of the uterus. "Such active interference is uncalled for and mischievous in a vast majority of these cases." The use of vaginal or cervical tampon (disinfected) will in most cases be followed by the almost painless and usually safe expulsion of all the contents of the uterus, and thus the dangerous element of traumaticism avoided. "Yet when operative means really become necessary," Dr. Price says, "there is no question that the smooth wire curette of Thomas, or the larger one described by Mundé, is the safest instrument that can be used. It is far less painful than the finger, more efficient, and if used carefully is less liable to produce injury."

The potency of uterine flexion in causing abortion in the third month is referred to, and in the writer's opinion is so frequent in its operation, that a vaginal examination during the second month of the gestation is advisable.

The address severely reprobates any manipulation of the os uteri during the first stage of labor, and especially any attempt at its rapid and forcible dilation. "More especially is this meddlesome and mischievous manipulation of the cervix in this stage of labor to be deprecated, when we have in the use of morphia, hydrate of chloral, and other anæsthetics, such safe and efficient means of overcoming the painful delay that so frequently attends it."

To the care of the perineum, during its extreme distention as the head descends, so as to prevent laceration at the moment of delivery, the address devotes considerable attention. The danger of leaving it entirely alone, as taught by some, is pointed out. The plans proposed by Playfair and Goodell, to relax the perineal tissues, while approved as accessory measures, are claimed to be insufficient. The point enforced in the address is that the descent of the head must be prevented by firm pressure directly upon it, until the peri-

neal tissues have had time to yield slowly, yet sufficiently, to allow the head to pass safely. To carry out the points made by Professors Playfair and Goodell, viz: "to relax the tissues of the perineum," and at the same time to assist in restraining the too rapid descent of the head, Dr. Price has recently used a towel four feet long, folded lengthwise to a width of six inches, passed in front of the pubes and over the trochanters, the free end secured by two strong safety pins, over a firm pad resting against the os-coccygis and the anal orifice. The effect of this is to crowd the surrounding tissues in the direction of the vulvar outlet, securing all the relaxation that is possible, at the same time keeping the head pressed towards the pubic arch.

The action of this pad and band is pleasant to the patient and effectually protects the coccyx from injury, which, as is well known, is often the cause of that most serious malady, coccydynia. At the moment of greatest distention, the action of the band should be aided with the left hand of the accoucheur, while the other resists the too rapid advance of the head by direct and firm pressure.

In every case the perineum should be inspected, and if any rupture of its proper tissues has occurred, the surface should be dusted with iodoform and closed by the proper suture.

The danger attending post-partum hemorrhage and recent teaching as to the best means of meeting it, are discussed at some length. "The chief point to be kept in view is to secure a firm tonic contraction of an empty uterus." The administration of a full dose of ergot just at the completion of the second stage of labor, is a matter of routine by many of our best obstetricians. The placenta should be immediately expelled by the Credé method—*using both hands*. The compression is to be continued until the action of the ergot is well established. If this is done no coagula form, there is little subsequent hemorrhage. The impression of the ergot should be kept up for twelve hours, and if a tendency to relaxation exists, for a longer period. The involution of the uterus is, by this treatment, advanced, and the risk of the septicæmia greatly reduced. * * * *

"Occasionally, however, in spite of every precaution, we fail to get contraction, and blood pours out in torrents. The uterus remains a limp, flabby bag. These cases are fraught with the greatest peril, and unless met with skill and promptitude will surely be lost." * * * * The one great point to be accomplished, viz., uterine contraction, must be kept distinctly in view; mere styptics will be unavailing. Profs. Wallace and Penrose, of this city, rely with confidence upon a sponge or soft cloth soaked in vinegar. The former says the effect of the vinegar is magical. The flabby uterine muscle instantly responds. The organ assumes a gizzard-like feel, shrinking down upon and compressing the hand. In the vast majority of cases the hemorrhage ceases instantly.

Dr. Albert H. Smith, in common with a large number of practitioners, relies upon injection into the uterus of a stream of water at a temperature of about 115° F. Dr. E. Wilson's preference is for a lump of ice passed quickly into the uterus, and upon this I have for many years relied, without failure in any case. * * * * Dr. Barnes

introduced and extolled in the most decided manner, the intra-uterine injection of solution of persulphate of iron in the proportion of one to three of water; but in the prolonged and very able discussion of his paper in the London Obstetrical Society, the dangers that attend this practice were fully established, and its use is not now supported. Swabbing the uterine surface with the iron is enthusiastically recommended by Engelman and others.

Placenta-prævia claims considerable attention in the address. "Shall the pregnancy be allowed to continue?" is a question that in every case has to be met at the onset. In the discussion in the Obstetrical Society of London, of a very able paper by Dr. Greenhalgh, advising the immediate induction of labor in all cases of placenta prævia, all the eminent gentlemen that participated, although differing upon details, agreed as to the inadvisability of allowing the gestation to go on after the diagnosis had been positively made.

The plan of management so ably advocated by Dr. Davis, of Wilkesbarre, in the address on Obstetrics for 1876, is approved, but is not successful in all cases. "Sometimes there is failure to get the forceps applied, the bleeding goes on, and version must be resorted to at once, or the bleeding is profuse and obstinate before dilatation allows of the procedures of Dr. Davis. Our old friend, the tampon, must be called in, or better, the colpeurenteur of Braun, filled with water tightly enough to distend the vagina and stop the flow, or better still, the carbolized sponge tent of large size passed well up the cervix. Dr. Jungbluth, of Aix la Chapelle, at Friedburg meeting of the German Gynecological Society, strongly advocates this treatment, and gives minute directions for the preparation of these tents, and the manner of using them. He reports six cases; all the mothers were saved, and only one child lost. Hofmeier and Behm, of Berlin, condemn the use of the tampon in all cases, and strongly urge premature combined version and slow extraction, with certainly brilliant results so far as the mother is concerned—one death in eighty-two cases—but their mortality with the children is frightful, being over 70 per cent.

After careful study of the whole subject of placenta prævia one cannot avoid the conclusion so well stated by Lusk, "that the result depends in a large measure upon the personal qualities of the physician in charge. A self-possessed man, cool, resolute, and with clear ideas of the anatomical conditions to be dealt with, will, if summoned in season, deprive even placenta prævia of a good share of its terrors."

The pathology and treatment of puerperal convulsions receives careful attention in the address, and the diversity of opinion that exists is deplored. Though usually associated with albuminuria, the fact is well established that the condition is not always present. "The generally received explanation is that these attacks arise from overstimulation, reflex in its origin, of the vaso-motor and convulsive centres, and this may occur independently of uræmia, although this condition vastly increases its liability." In treatment the deleterious influence of mental excitement, exposure to cold, and indigestion, are to be kept in mind. When an attack threatens, full doses of

bromides, of hydrate of chloral, and morphia (the latter hypodermically), are indicated when the action of the kidneys is deficient; the muriate of pilocarpine (hypodermically), aided by hot foot-baths to bring on diaphoresis, are very beneficial. But perhaps the most efficient of all remedies, at this stage, is the free abstraction of blood. No other means can be so safely relied upon to lower arterial tension, diminish irritation of the vasomotor and convulsive centres, and restore to the kidneys their normal functions. Spiegelburg claims that these three indications are most completely filled by venesection.

Dr. Price traces the causes that brought this fine "therapeutic measure" into disrepute, and earnestly pleads for its proper use.

Puerperal fever is the last subject discussed, and from its great extent* this discussion is necessarily limited. The difference in views of Profs. Thomas and Barker, as brought out in a recent discussion in the New York Academy of Medicine, is referred to. The writer concludes the subject by a brief statement of the pathology, etiology, prophylaxis and treatment from the Vienna standpoint, as recently given by Prof. W. M. Jaggard, of Chicago, in the *Medical News*, of this city.

Dr. Price in conclusion said, "I wish to congratulate you upon the progress that marks the history of Modern Obstetrics. The greatly increased skill in action and precision in results is most encouraging. Time will not permit of details, but I will name the use of anæsthetics, the better appreciation of the action of opium, ergot, chloral, pilocarpine, and of hot and cold applications, and consequently their more judicious and efficient use in practice. And lastly the general use of antiseptics, by which the results in operations have been vastly improved and the most formidable disease of the parturient condition shorn of much of its danger. To the younger members let me say that no branch of our science is more worthy of or requires higher culture than this.

"The difficulties and dangers to be met are not only equal to those in any other part of surgery or practice—but they are likely to be sprung upon you without time for special preparation. In most of the formidable operations of surgery you can look about you and prepare carefully for the work—but in obstetrics, a convulsion, a frightful post-partum hemorrhage, or a ruptured uterus, may confront you most unexpectedly.

"To the young men in our ranks I earnestly appeal, to make yourselves, in every way, worthy of the confidence of the other sex—for it is the highest tribute that can be paid to your professional culture and purity of character, for an intelligent and pure-minded woman, to seek your care in the perils of child-birth or in the diseases peculiar to her sex.

"In making this appeal to you, specially, I intend no discourtesy to those excellent women who, despite all obstacles, have trained themselves for good work in the profession, and whom we have, at last, been sufficiently just to admit to full membership. I make it simply because of

my conviction that in all the future, as it has been in the past, the chief burden of professional work must come upon our sex. The place of women in medicine, as in all public life, is exceptional, and must ever be limited. And in speaking thus I have no wish to open up the much abused and perhaps silly question of woman's rights. She is as ourselves, a human being, having the same impulses, equal talents, and confessedly greater quickness of discernment, and she should certainly have the same *right* as ourselves, to do anything that is respectable and proper. And it is mean and tyrannical in man, the stronger, to place obstacles in the way of any individual woman, who—impelled by God-given talents, or perhaps by necessity put upon her by the indolence or incapacity of a father, or husband, or brothers—seeks the honors and emoluments of public life. Yet such must ever be exceptional. God has not left it for man, or woman either, to arrange the respective duties of the sexes. He has stamped upon woman, functions which involve duties that will always limit her public life. Exceptional women may be successful merchants, doctors, lawyers, or even captains, but through all time the mass will continue to be wives, and mothers, and sisters, and find their highest duty, as well as purest happiness, in keeping up in all its sacredness and purity, the true home—that institution upon which, more than upon churches, and constitutions, and armies, depends the perpetuity of virtue, of liberty, and of independence."

"OBSTETRICAL FORCEPS JOINED AT THE JUNCTION OF THE BLADES AND SHANKS,"

was the title of a paper by Dr. J. A. McFerran, of Philadelphia, who said:

The much ado about individual skill in the use of the obstetrical forceps, the confusing descriptions of complicated manœuvres necessary to their proper handling, the solemn warnings of celebrated teachers to the young and inexperienced, are reflections upon the intelligence of the majority of the profession, or a confession that it is an instrument which should be banished from use.

Of necessity, there can be but few experts; every practitioner should, therefore, be qualified to use the instrument. To me, it seems an incomprehensible thing that any one taught as they must be in our colleges, could be incompetent to use the forceps properly, and yet be qualified to practice safely the more recondite duties of their calling.

In no branch of our profession is prompt, decisive, and intelligent interference called for oftener than at the bedside of a woman in labor; and there is no instrument at the bedside so efficient as the forceps, and none in the whole domain of surgery should be better understood.

After recounting what he considered to be the chief objections to all the forceps in ordinary use, the speaker said: "I designed a pair of forceps in the fall of 1877, joined at the junction of the blades and shanks, upon which I read a paper before the Philadelphia County Medical Society, that was published in the *MEDICAL AND SURGICAL*

* Dr. Price, in speaking of vaginal irrigation in cases of puerperal fever referred to a bed pan devised by Dr. Hanks, of N. Y., as greatly facilitating the operation. It is well made, at a very moderate price, by George Marston, 406 East 20th street, New York.

REPORTER of December 1 and 8 of the same year. These forceps I bring before the Society after having fully tested them on several occasions after the failure to deliver with other forceps, and always with perfect and quick success; and I can now, with a confidence such as experience alone can give, urge upon the profession a trial of this instrument. Once the forceps applied to the head, it is left free to deflect, flex, or extend. The line of traction is transferred from the junction of the head and neck to the joint of the instrument. By making the handles a lever, and one hand the fulcrum, placed close to the vulva, the head can be flexed and swept down in the axis of the pelvis. Even when traction is made from the extremity of the handles, the joint leaves the head free to deflect and pass an obstruction with the greatest possible ease. A chain will pass through a long and tortuous tube, when the length of the links does not exceed the distance between the curves, and it is upon this principle that the instrument acts when traction is made. Positions may be corrected, doing away with the use of the lever and a formidable array of instruments, avoiding dangerous delays and long-continued pressure. To illustrate, I have selected the sacro-pubic position. The head is somewhat extended and caught at the superior strait, the forehead resting on the promontory of the sacrum and the occiput on the pubic bone. Of course, the proper thing to do would be, if we could, to turn the forehead to the right and convert the third into a first position. But, if we suppose the head forced down between the two points, we may not be able to do so; only experts, after much trouble, could do so. With the ordinary forceps, as generally used, the head would be forced more and more between the opposing points of the strait. But with the jointed instrument the difficulty could be easily overcome, by producing greater flexion. Operating through the joint upon the vertex, it would be tilted back towards the hollow of the sacrum, thus liberating the head and facilitating its descent. In other positions the diameters can almost be made to coincide, by operating through the joint. In all cases we should endeavor to keep the head flexed, in order that it may avoid obstructions and the more easily rotate or be rotated in the pelvis. The nearer the posterior fontanelle can be kept to the centre of the pelvis, the easier will the labor be; with the jointed instrument this can be done without the manifestation of any great amount of skill by the operator. I ask you to remember that the jointed instrument has all the advantages of the ordinary forceps, as a tractor, as a lever, and in the independent application of the blades, while the disadvantages are dropped by simply placing a joint so that the motions of the fetal head shall not be interfered with."

Then came Dr. Mary Stinson's paper on the "Work of Women Physicians in Asia," which we publish elsewhere, after which the Society adjourned for the day. In the evening receptions were held by Drs. Lawrence and C. S. Turnbull and by Dr. John V. Shoemaker.

The President, Dr. Henry H. Smith, delivered his address in Association Hall, when he said that the recurrence of the period when delegates from all our County Medical Societies assemble to

interchange professional opinions and renew or form the fraternal ties of a distinguished brotherhood, has again brought us together on this the thirty-fifth annual session of the Medical Society of the State of Pennsylvania.

This theme I would formulate as the

IMPORTANCE AND USEFULNESS OF SCIENTIFIC ORGANIZATIONS

to our profession and the public.

In order correctly to comprehend the objects obtainable by such organizations, it may be useful, 1st. To note their origin and elementary form, as described in history; 2d. Show in what manner our annual meetings are useful to the profession and the public; 3d. Allude to the reciprocal obligations of the public to the profession.

The Doctor then referred to the history of the first societies organized.

In the association of individuals that thus formed societies, it soon became apparent that some laws or rules of action applicable to each and every member must be adopted, in order to regulate intercourse and restrict irregular or individual opposition to the interest of society, and that in these laws, as in those of all communities, the most important portion would be "the penal or vindictory clause," it being useless to say, Do this or avoid that, unless the law also declared what would be the penalty or consequence of non-compliance. Ethics, or the law of manners, collected in a paper-book, termed Codex or Code, was thus adopted at an early period in the history of all associations; and the Code of Ethics of the American Medical Association is but another illustration that "history repeats itself."

The origin of our own State Society dates back only to the year 1848, when the pre-existing County Societies of Chester, Philadelphia, and Lancaster, elected delegates to a Medical State Convention that assembled in the city of Lancaster, to take the necessary steps to create a State Society such as was required to form a part of the American Medical Association.

A question that has been warmly discussed in connection with this Code is the right of members of the American Medical Association, or a county society, to consult at the bedside or office, in regard to the diagnosis and treatment of disease, with those who practice and believe in an exclusive dogma, and especially that one revived by Hahnemann, of *similia similibus curantur*, or that "like cures like."

It matters little, in the consideration of this question, to ask how or why it arose. The propriety of such consultations is positively settled by the Code, and hence its repeal is advocated by that comparatively small number, especially in New York, who, perhaps, anticipate benefit from the change. Any one who reads the clause in reference to consultations will readily see that the Code recognizes the fact that two physicians of different medical creeds cannot agree on any question of pathology and therapeutics, when each is conscientious in the correctness of his own professional opinion.

The influence exercised by these annual meetings of our Society is, however, by no means limited to medical ethics, but extends to the entire community through the scientific work thus accomplished.

In reviewing all that this Society has done in the last thirty-five years, our increased knowledge of the best means of preventing or alleviating disease is very apparent.

No Post-graduate course of medical instruction, now so much in vogue, "with doctrines fashioned to the varying hour," offers more valuable information to a medical man than that afforded by the papers and discussions presented in our sessions.

Since 1848 many advances in pathology as well as in practice have been made in this body, and been subsequently developed for the public good.

In the annual reports made by the able chairman of the Section on Hygiene, and especially by him who has also for years faithfully served the Society in the care of its funds, how many suggestions have tended to secure the comfort and sanitary safety of many of the towns and villages of this great Commonwealth!

The fear of "taking cold," and suffering from exposure to fresh air, is one constantly brought to the notice of every physician. Whilst apprehensive of "taking cold," the public seldom recognize the danger of being too hot, or of living in a temperature that often exceeds 75° Fahrenheit, in which every aperture for the entrance of the fresh air, that is so essential to the health of a respiratory creature like man, is carefully closed.

Not only is there with many an ancient and popular dread of fresh air, but the evil influence of fresh *night* air is yet widely noticeable. Many, who admit to some extent the beneficial influence of fresh air during the day, will hesitate about breathing the same air after sunset—a prejudice of ancient date.

Among the varied papers read in our meetings of marked public interest, and indirectly connected with the fresh-air question, was one "On the Influence of Growing Plants on Lung Diseases," which those present at our last session can readily recall.

The experiments there stated also render it probable that ozone is generated by *flowering* plants, thus rendering them an active disinfecting agent. From personal observation of florists and gardeners threatened with consumption, the author of the paper says, "he is convinced that their health was greatly benefited by the influence of plant life and the temperature and atmosphere of green-houses" (not hot-houses).

Popular sentiment has for a long period been entirely different from this, and many who are well read yet regard the presence of plants in a chamber as injurious to health, from the supposed amount of carbonic acid gas given off by them at night.

It may not be inappropriate in connection with the subject of State Medicine, also to call attention to the propriety of memorializing the legislature to modify the present mode of capital punishment, and make it correspond with the scientific progress of the age.

Without discussing the necessity of such punishment, we may justly urge that as its main object is the removal from society of those whose lives are detrimental to its best interests, this should be accomplished in the least painful manner; and it does seem as if death by means of electricity should at present receive due consideration.

I feel that I advance the cause of humanity

when I direct attention to this subject with a view of obtaining legislative sanction.

The great advances made in chemistry, and our increased knowledge of pathology, have also greatly changed the treatment of disease and the administration of medicine.

I know that the popular idea is, that the regular, scientific practice of medicine has been greatly benefited in this respect by the introduction of homeopathy; but this is not so.

Why are we so generally designated as allopaths that even a Congressional bill contains the name?

The answer usually given is, an allopath is one who treats disease by large and nauseous doses of medicine, whilst a homeopath gives little tasteless powders and sugared pellets.

Now, nothing is more erroneous as a definition than this statement. The dose of a medicine has nothing whatever to do with the name of allopath or homeopath. The distinction between these two schools of medicine is founded on a much more serious difference.

As our Code directs us to be ever vigilant of the welfare of the community, and to give counsel on matters specially pertaining to our profession, I have thus imperfectly alluded to a very common error, the result of which may be briefly summarized as having shortened life and lengthened suffering. I trust, however, that in referring to the unscientific character of homeopathy as a medical doctrine, I may not realize the correctness of the statement of Macdonald in one of his essays, "that many forms of error, perhaps most, are better let alone, to die of their own weakness, as the galvanic battery of criticism only helps to perpetuate their ghastly life."

I have, perhaps, detained you too long from pleasanter engagements in thus alluding to topics known to many of you; but in doing so, I have endeavored to illustrate "the importance and usefulness of scientific medical organizations to our profession and the public."

If I have failed in this, I trust you will recognize the difficulty of properly discussing the subject in the portion of time justly allotted me. I have, as you will notice, abstained from reference to the progress of medical science during the past year, though it might have proved more attractive, as this subject will be ably presented by other members of our Society.

Permit me before closing to acknowledge my appreciation of the attention accorded me on this occasion, and to express the hope that the present session of the Society will promote not only the hygienic interests of the Keystone State, but also that of other communities.

THIRD DAY.—MAY 16.

At the morning session, Drs. Leidy, Daly, and Trill Green spoke in favor of a resolution requesting the members of the profession to aid the Anatomical Board in carrying out the acts of assembly relative to the distribution of cadavers for dissection. The resolution was adopted.

"THE VALUE OF PUPILARY SYMPTOMS IN GENERAL DISEASE—AN ANALYSIS OF ONE THOUSAND CASES,"

was read by Dr. W. S. Little, of Philadelphia.

After the hospitals for chronic disease had admitted ophthalmic surgeons, trained in special hospitals, to their wards, ophthalmic medicine rapidly developed, and soon hospitals for acute disease claimed their services. The past twenty years has been the era for developing ocular symptoms in general disease. Medical education has felt the same impulse, and post-graduate instruction is the outgrowth of the success of instruction in ophthalmic hospitals abroad and at home. Special hospitals for the eye and ear now include in many of our large cities a department for throat, skin, and nervous diseases.

Medical ophthalmoscopy has been the principal factor in developing ophthalmic medicine, lesions in the eye-ground being found in Allbutt's cases in 89 per cent., in Noyes' cases that I have studied in 73 per cent., in Gower's cases in 100 per cent.

In my case studied at Elwyn, Pa., the institution for feeble-minded children, under the care of Dr. I. N. Kerlin, I found lesions in the eye-ground in 13 per cent. the age of the patients and varieties of disease exhibited there rendering the percentage necessarily less than the others referred to.

The study of the visual field for perception of light and color is another means of help in studying general disease.

Ophthalmoplegia externa and interna has received the greatest attention of late. Pupillary symptoms belong under the head of ophthalmoplegia interna.

The statistics of many observers vary largely as to their presence in disease, especially of a nervous type. I have believed the variation to be due to non-recognition of the symptoms being produced by intra-ocular and extra-ocular conditions, only the latter are of any value in general disease, and the former must be excluded, unless both conditions are recognized.

Castiglioni found seventy-five per cent. among insane; Nasse, sixty-four per cent; Wennecke, twenty-four per cent. The study of Allbutt and Gower's cases affords me their presence in twenty-three per cent. of their cases in acute disease. Allbutt and Noyes, Insanity—.05 per cent. in insanity.

The development of theories of pupillary movements from ancient to modern times has changed as anatomical knowledge of the cerebro-spinal system has been rendered clearer and anatomy of the eye worked out; the influence of reflexes upon the pupil are now quite well-defined, and the pupil can be studied with better knowledge than formerly. In acute disease among Allbutt's and Gower's cases it has a prognostic value, in sixty-seven per cent. of the cases fatal results occurring.

After giving the physiology of pupillary movements and describing how to study the normal and abnormal pupil, the results of a personal examination of three hundred and fifty cases at the Institution for Feeble-Minded Children at Elwyn, Pennsylvania, under the care of Dr. I. N. Kerlin, are stated. The examination here was thorough, and intra-ocular and extra-ocular conditions, as a factor, studied. Ophthalmoplegia externa existed in only two cases. Ophthalmoplegia interna from cerebral causes, or associated with the disease exhibited, was present in seventeen per cent. as follows: Males, 17.4 per cent.; females, 17.3 per cent.

Varieties of pupil :

Maximum	6.2 per cent.
Minimum	4.2 "
Unequal	6.5 "
Hippus	0.2 "

Varieties of Diseases :

Imbecility {	High grade	9.7 per cent.
	Middle grade	14 "
	Low grade	12 "
Ideo-imbecile		28 "
Idiocy		41 "
Juvenile insanity		20 "
Epilepsy		37 "

Intra-ocular causes excluded in 20.9 per cent.

At the Male Institution for the Insane, S. E. District Penna., Norristown, Pa. :

154 males, 43.5 per cent. with pupillary symp.	
154 females, 35.7 "	" "
308 total, 39.6 "	" "

Varieties of pupil :

Maximum	11 per cent.
Minimum	12 "
Unequal	14.6 "
Immobile	1 "

Varieties of Diseases :

Monomania	16 per cent.
Melancholia, Acute	25 "
Melancholia, chronic	35 "
General Paresis	100 "
Imbecility	20 "
Chronic Dementia	39 "
Mania, Acute	35 "
Mania, Chronic	55 "
Mania, Recurrent	50 "
Epilepsy	66 "

My work being done in institutions whose medical officers reputation in diagnosing the disease treated there, renders my statistics more valuable. For the facilities granted and enjoyment my thanks are due.

One thousand cases have thus been studied :

602 males, 22.4 per cent. pupillary symptoms.	
398 females, 24.8 "	" "
1000 total, 23.5 "	" "

"ALARMING AND DANGEROUS DOSES OF THE MYDRIATICS,"

was the title of a paper by Dr. Edward Jackson, of West Chester, who said that as it is important to understand the limits which are imposed upon the dose of atropia and other mydriatic alkaloids by danger of fatal poisoning, this paper has been prepared to remind practitioners that these limits are not really so narrow as many seem to think. Atropia being generally used in doses of one milligramme (one-sixtieth of a grain) or less, the impression grew that it would be dangerous to greatly exceed that amount; and this impression was strengthened by the fact that somewhat larger doses were apt to cause the common symptoms of atropia intoxication. But among two hundred and fifty-seven reported cases of poisoning by the various mydriatics, only seventeen had proved fatal—while the whole number of fatal cases of mydriatic poisoning to which even the slightest allusion had been found was, for belladonna and its preparations, eleven; datura, twenty-

ty-five; and hyoscyamus, two; and it was probable that some of those caused by datura were counted twice.

The paper contained quotations and abstracts of such of the above cases as bore directly on the subject under discussion, among them twelve cases in which the amount of atropia taken was known to exceed one half-grain, yet the patients recovered. Allusion was also made to the report of Dr. Fuller, of London, on the extreme tolerance of belladonna shown in choreic children, one taking as much as seventy grains of the official extract daily, and another taking thirty-seven grains of atropia in eighteen days. In the case of acute mania reported by Dr. Sydney Ringer, one-grain doses of the crystallized alkaloids, atropia, daturia, and hyoscyamia, were repeatedly given with benefit to the patient.

It was urged that, knowing these facts, practitioners should not hesitate to use this class of remedies more freely, whenever such use of them seemed indicated, special reference being made to the preservation of eyes from damage by iritic adhesions.

Then followed

"A FORM OF EPITHELIAL MYCOSIS,"

by Albert G. Heyl, M. D., of Philadelphia.

The disease described in this paper has long been known to ophthalmologists, and has been principally studied by them. In its graver forms the general symptoms are of far more importance than those observed in the eye, as the disease is frequently fatal. It is, therefore, opportune to give an account of some recent researches which have cleared away a great deal of obscurity which has invested the subject. This disease has been known under various names, *e. g.*, corneal gangrene, kerato-maleia, ophthalmia Braziliiana, etc. Graefe described it under the title of corneal ulcer of infantile encephalitis; his idea being that the corneal affection was of atrophic nature, the primary cause being an encephalitis. Gastrowitz has made this hypothesis untenable, by showing that these supposed encephalitic products are simply the remnants of foetal life. Leber, within a few months, has given a full description of a parasite found *intra vitam* in the conjunctival debris, and post mortem in the epithelium of the renal pelvis and in the small intestine. This parasite attacks the epithelial cell, inducing fatty degeneration of its structure. The dead cells accumulate in lamina, giving rise to a characteristic dry parchment-like appearance, the so-called conjunctival xerosis. The disease is usually ushered in by hemeralopia. This symptom, which is associated with the conjunctival xerosis, may last a month or two when corneal ulceration commences.

About this time general symptoms appear. There is rise in body temperature, frequency of pulse, a dry, harsh condition of the skin, the hair on the head becomes dry, lusterless. Along with this a peculiar state of apathy is developed. Persistent purging and vomiting occur, and finally broncho-pneumonia, to which the patient succumbs. All cases do not run precisely this course. Some do not proceed beyond the stage of of hemeralopia, in others the corneal ulceration appears after the inception of the general symptoms. In some the apathetic state is the most

striking symptom. In some constipation exists instead of the purging. The existence of a parasite in the conjunctiva in this disease was known before Leber's researches. But Leber has not only given a clear account of it, but also shown that it attacks the epithelial cell, and that it is found in other localities besides that of the conjunctiva. Probably the symptoms of the disease are traceable to this epithelial mycosis. Dr. Heyl gave adduced reasons for considering the epithelial cells as the receptive organ of centripetal nerves. Destroy these receptive organs in the conjunctiva and certain impressions of light will fail of being conveyed to the proper centre. A distinction was drawn between those impressions which, coming from the outer world, may issue into voluntary action and those which issue into involuntary action. Thus the sensation of light, and that impression of light which is followed by the reflex movement of the lids, are two different things. It is the latter which is absent in this disease by reason of the destruction of the terminal epithelial cells by which it is accomplished. The same rationale may be applied to the skin, which is a vital organ containing a principal part of the thermic apparatus. The epithelial cells may be looked upon as the receptive organs through which the sweat-glands are set in action. Destroy these, and the function will be abrogated. Thence the apathetic state and, possibly, the broncho-pneumonia are developed. The purging and vomiting seem to be due to the direct presence of the parasite. In the treatment, the careful administration of food is important, and as the application of moist heat to the eye has been found very serviceable, possibly it would also be if applied to the surface of the skin.

After which Dr. Carl Seiler of Philadelphia read a paper on

"AN ELECTRIC LARYNGOSCOPE,"

in which he described an apparatus for the illumination of the laryngeal, nasal, and other cavities of the body by means of an electric incandescent lamp. He first gave a short historical sketch of the experiments made by others in the same line of investigation, and described the instruments invented by Adams, Trouve, and others, and then gave a detailed description of his instrument, illustrated by a demonstration of its capabilities for practical use in examining the laryngeal and nasal cavities.

The instrument consists of the ordinary head reflector, attached to which is an arm of metal four inches in length, which carries on its end a small incandescent lamp, lighted by electricity by a current from a battery. The light of the lamp is reflected from the head mirror into the patient's mouth, and is then reflected downward by the ordinary laryngeal mirror. A shield of silvered mica is placed around the anterior portion of the lamp to prevent the light from falling directly into the patient's face, and also to utilize all the light given off from the incandescent carbon filament. The apparatus is light and easily carried on the forehead of the operator, and has the advantage over the head mirror without the lamp attachment, that when the reflector is once adjusted on the forehead, the light is always

thrown in the direction of the axes of the eyes. It has also the advantage over similar instruments that it can be used for the examination of the eye as well as of the ear, since the operator can bring his pupil before the central perforation of the reflector; and should the source of electricity give out unexpectedly, which will frequently happen when the operator is not sufficiently conversant with the tricks of batteries, the head mirror can still be used in the ordinary way by reflecting a stationary light.

Then followed a paper entitled,

"DOES A CHRONIC DISCHARGE FROM THE EAR MAKE LIFE INSURANCE HAZARDOUS?"

by Dr. Charles S. Turnbull, of Philadelphia, who calls attention to a point of vital interest to life insurance companies and their medical officers. He describes the too frequently hazardous condition of those persons making application for life insurance policies, holding that some of these, while passing a first-class physical examination, may at the same time be suffering from fatal discharge from the ear.

He maintains that whatsoever the plan may be, whether mutual, life, or endowment, the risk incurred and the liabilities assumed by life insurance companies, through their medical examiners, is in no small way compromised by the existence of a chronic ear disease of the applicant to be insured.

Deaf persons are not insured by the leading life insurance companies, at least not at ordinary rates, because of the self-evident fact of their being in imminent peril; hence, such are not considered, or are accepted as "extra hazardous."

An otorrhœa may exist and be entirely overlooked by experienced examiners, and this is, in his opinion, in many cases a much greater source of danger to life than that arising from the mere physical defect of not hearing. Deafness of a dangerous or hazardous degree cannot be concealed, and is only an element of risk in so far as accident is concerned; while a chronic purulent inflammation of the middle ear, with, perhaps, some polypoid or necrotic complications, can be intentionally or unintentionally concealed, or on the other hand be overlooked, while it threatens life within a year. One remaining sound ear may do all the work, and the examiner, as well as intimate friends, may never suspect the defect. Total deafness, like total blindness of one side, may exist for years, even a quarter of a century, without even the afflicted individual being aware of the fact, and a purulent discharge continue from childhood without causing annoyance, or indeed even a thought.

He suggests an ocular inspection of the ears, and at times, when of sufficient importance, the employment of an expert, because in his experience he had known of liabilities incurred where even a hasty examination of the ear would have saved the insurance companies thousands of dollars.

The same may be said with reference to the organs of sight.

He concludes by urging the profession to exercise more care in the treatment of the ear-symptoms and complications in the exanthemata, and likewise calls especial attention to the importance

of the insurance companies making the examination of the ears compulsory in every case.

As an easy yet complete method of examination of the ears, he suggests the following, which places the examiner in a secure position, and makes him entirely independent of the statements of the examined, as well as of instruments of precision, or reflected light:

1. *Test each ear separately with the watch, the eyes being covered.*

2. *Inspect by good daylight the auricular region, especially noting condition of mastoid or cicatrices thereabouts.*

3. *Inspect (nasally, as do the gas-fitters) each auditory meatus, and;*

To sum up—what the impaired hearing does not suggest, cicatrices from loss of bone or fistulous orifices over temporal bone, will point out; while the presence of pus, or what is more significant, of fetor, will settle the question.

A purulent discharge from the ear should always raise a question with insurance companies, and its character and ultimate course as to the future health of an individual can only be settled by an acknowledged expert, *i. e.*, men of experience must say whether it be curable or not, so that full justice may be done both examined and examiner.

Dr. P. D. Keyser read a continuation of his paper entitled

"OPHTHALMOLOGICAL OBSERVATIONS DURING TEN YEARS' SERVICE IN THE WILLS EYE HOSPITAL."

He described a cystotome of his design for rupturing and drawing up of the anterior capsule for the removal of a piece of it in the operation for extraction of cataract. He gave his modification of Pagenstecher's operation for the removal of pterygium; and also the history of an interesting case of complete paralysis of the sixth pair of nerves from injury to the head, causing extreme double convergent strabismus, which was relieved by operation of shortening and bringing forward the external recti muscles.

Four cases of glioma of the retina were narrated, two which were operated upon by enucleation, and the macroscopic and microscopic account of the balls given.

Dr. John B. Roberts read the address in surgery, entitled

"SURGICAL DELUSIONS."

Many surgical theories and procedures have become traditional, and are accepted as true and correct, merely because reverence for antiquity or careless acceptance has not questioned their right to be classed as surgical facts. The present age is an incredulous one, and demands accurate investigation of all such claims. The field of investigation is large, for progress has been retarded by the influence of theorizing writers and monochromatic vision, the example of non-seeing and non-looking devotees of the fetiches of surgical superstition, and the convincing effect of a repetition of false statements. I shall select a few topics which have greatly interested me, and concerning which I probably differ quite widely from many of you.

Chloroform Anæsthesia.—Many still cling to the delusion that chloroform is a safe anæsthetic, because they have never seen a patient die from it. Is one man's experience to weigh against the physiological, the experimental, the clinical experience of the whole world? Dare we employ chloroform instead of ether, when recognized authorities state that in chloroform anæsthesia death occurs without warning in the hands of experienced administrators, when some five hundred deaths have already been reported, when Schiff and Dalton reject it in physiological laboratories because of its mortality, when the Scientific Grants Committee of the British Medical Association assert that chloroform is a more dangerous anæsthetic than ether? Adherence to chloroform in the face of such facts is criminal, when circumstances permit ether to be obtained. The assertion that it is often impossible to produce anæsthesia with ether is the result of inefficient methods of administration. Ether, if given as chloroform is and should be given, is in truth a useless anæsthetic, but given properly it is efficient.

Value of Styptics.—The belief in the necessity of styptics is a delusion less dangerous than that just mentioned, but is given more extended credence. Such agents are seldom, probably never needed in general surgery to arrest hemorrhage. When ligatures, torsion, or acupressure is not demanded (and such is seldom the case unless the artery is as large as the facial), moderate direct pressure applied in dressing the wound is the only hemostatic required. Styptics often do harm, and, as they are not needed, they should be discarded.

Fatality of Small Hemorrhages.—There is much misapprehension about the quantity of blood that a healthy man can lose with impunity. Many who often look with equanimity upon a parturient woman losing a pint of blood from the uterine sinuses, would be dismayed at a man losing half or quarter that amount during removal of a tumor. While not advocating needless waste of blood, and especially in patients suffering surgical shock, I assert that there is an unnecessary fear of blood spurting from a few insignificant vessels. The largest artery can be controlled by pressure not greater than is used for ringing the electric bell in your hotel. Hence there is always sufficient power in your fingers to obviate hemorrhage until strings can be obtained and applied.

Danger of Trephining the Skull.—The dislike to make exploratory incisions in closed fractures of the skull evinced by some surgeons, and the objection of others to trephining, and thus opening the diploic structure in open fractures, are delusions of a most disastrous tendency. To wait until symptoms of cerebral compression or inflammation have supervened, is to lose the most favorable opportunity for mechanical relief. Such a Falian policy is often followed by death. The treatment of open and of closed fractures of the skull should not be looked upon as very different, since with the present improved methods of dressing wounds the successful issue depends almost entirely upon the cerebral rather than the cranial phase of the injury. If such fractures as are usually seen in the skull were not in proximity to the brain, the surgeon would consider them almost trivial. The feature of closed frac-

tures that renders them so troublesome is the obscurity that accompanies them. I have, for a number of years, strongly advocated making closed fractures open ones by means of an exploratory incision, whenever there is a suspicion of the existence of depression or splintering. In open fractures, operation to elevate depressed portions and get rid of splinters of the inner table thrust into the membranes should be undertaken rather than avoided. It is better to err on the side of action than that of inaction. Careful manipulation and proper dressings at an early stage are sources of less risk than is incurred by the surgeon who leaves unseen and unsuspected fragments thrust into the membranes or brain.

Operative Delay in Strangulated Hernia.—A similar delusion of fatal issue is that leading to postponement of the operative interference in strangulated hernia. Repeated attempts at forcible taxis and medical pow-wow with temporizing measures have ended more lives than the use of the knife. Herniotomy done within twelve hours is almost always followed by recovery. Death is to be expected, however, if strangulation has existed for two or three days, and the gut has been bruised by violent manipulation in the endeavor to relieve the constriction by taxis. Moderate taxis under ether, a half day's treatment with cold applications and the internal use of morphia, and a second moderate attempt at taxis, followed, if unsuccessful, by immediate operation, is the sequence to be followed in strangulated hernia. When symptoms of strangulated hernia exist, the slightest fullness and tenderness in one groin over either of the rings is a sufficient localizing indication to warrant operation.

Operative Delay in Acute Phlegmonous Inflammation.—No insane delusion, no Spanish inquisitor, ever caused so many hours of excruciating physical torture as the hallucination that acute abscesses and furuncles must not be incised until pointing has occurred. All the world knows that evacuation of imprisoned pus in phlegmonous inflammations means instant relief of the agonizing pain; yet how few of the profession early and freely incise such inflamed tissues, unless they first see the yellow pus under the thinned skin, or feel the fluctuation of the fluid in the abscess cavity? The pain is caused by the effort of the pus and sloughing tissue to escape. Is it not, then, more rational to make a free incision to-day than to wait till next week? Time and pain are both saved by early incision. If the cut is made before the pus has actually formed, so much the better. Probably no form of abscess needs early and free incision more imperatively than that under the palmar fascia. Destructive burrowing of pus is prevented by this radical procedure, which, also, saves the patient many days of poultices and purgatory.

Operative Delay in Malignant Tumors.—Much bad surgery results from a delusive postponement of operative interference in malignant diseases. Instant removal is to be practiced in such cases, provided the patient is deemed fit to stand the surgical shock.

Necessary Fatality of Traumatic Tetanus.—That traumatic tetanus is of necessity fatal is a commonly held opinion. Proper treatment is sometimes neglected because of this belief in its hope-

lessness. That the prognosis is extremely unfavorable I admit, but that cases of a severe type recover is undoubted. Chloral hydrate in full doses has given the best results; but I do not propose speaking of therapeutics at this time—I merely wish to impress upon the profession the fact that a fair number of cases of traumatic tetanus recover.

Fatality of Pericardial and Cardiac Wounds.—The prevalent notion of the excessive danger of these wounds is delusional, at least in as far as it teaches that these structures will not brook surgical interference. The pericardial sac should be dealt with exactly as the pleural sac, by aspiration, incision, irrigation, and drainage, according to the lesion. That simple puncture or aspiration of the heart itself is not accompanied by the expected risk to life has been pretty well shown, though I am not prepared to recommend its general adoption for trivial cardiac conditions.

Symmetry of Normal Limbs. Another delusion still existing in many minds is that the lower extremities are usually of the same length. Clinical and anatomical investigation show that asymmetry in the length of normal limbs is a common occurrence. Therefore, measurements of the legs in cases of fracture are of little value, since it is impossible to know whether it is the femur of a long or a short leg that is the seat of injury.

Uselessness of Treating Vicious Union of Fractures.—It is a fact not sufficiently appreciated that many cases of deformity from imperfectly treated fractures of long bones can be remedied by refracture. Over and over again have I seen cases of grave disability and deformity cured by the application of sufficient force to break the callus uniting the misplaced fragments. Five or six months is not too late to resort to this expedient for correcting what otherwise must be a life-long evidence of defective surgical attendance.

There are many other prevalent surgical delusions, such as: that bony union of transverse fractures of the patella and of intracapsular fractures of the femoral neck cannot take place; that chronic purulent discharges from the ear do not need active treatment, that hypermetropia and hypermetropic astigmatism can be properly estimated and corrected without paralyzing the accommodation; that it is improper to perforate the nasal septum in cases of great deviation; that crooked noses are not amenable to treatment; that corneal operations and cataract extractions should be treated by cotton padding and bandages to the eyes; that fractures should be treated with carved or manufactured splints.

While an earnest advocate of conservative and of reparative surgery, I believe that when operative surgery is demanded it should be aggressive. Delay, indecision, and inefficiency impair the value of much surgical work, and are often the legitimate result of a superstitious faith in delusive surgical dogmas.

Then followed the paper by Drs. Edward T. Bruen and J. William White, which we publish elsewhere.

Dr. Nancrede then read a paper on

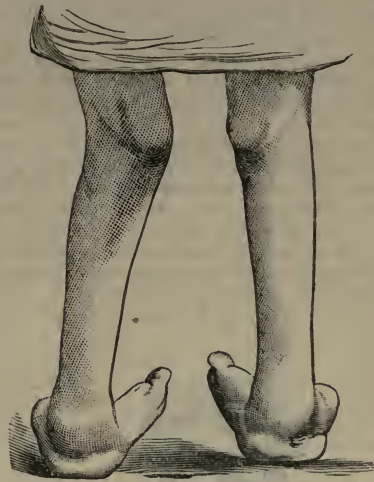
"THE BICHLORIDE OF MERCURY AS A SURGICAL DRESSING."

The next paper on

CLUB-FOOT. IS TARROTOMY NECESSARY IN CHILDREN?

Was by Dr. De Forest Willard who presented a patient (together with photographs and plaster casts) upon whom he had operated two years ago for an extreme degree of varo-equinus, congenital and double. The girl had been subjected to tenotomy when an infant by a homoeopathic surgeon, but as he never returned to the house after the operation, it may well be imagined that little benefit was secured, and the result was that the parents were so prejudiced against any interference that they permitted the child to go untreated, and, running around in her bare feet, she had, when seen at the age of eight, produced the deformity shown in Fig. 1. (Front view. From a photograph.)

FIG. 1.



The outer dorsal aspects, protected by large bursae and callosities of the size of small oranges, were in contact with the ground at each step, while the toes presented backward, and the plantar surfaces looked outward, owing to the great inversion of the legs in the effort not to strike the toes in the "reel-foot" action. This inward twist was most marked at the left knee, and the anterior surface of the tibia was rotated at least 30° on its long axis from its normal relation to the femur, thus causing the calf of the leg and the deformed heel to present directly outward. The legs were atrophied, the astragalus and cuboid very prominent in both feet, and the deformity at the medio-tarsal articulation sharp and abrupt. Strong pressure caused but little change of position in either foot, and the tissues of the soles and inside portions were extremely dense. The left foot was somewhat worse than the right, and its position was aggravated by the twist above mentioned.

The plan decided upon was to freely divide the tendo achillis and the tibials, as well as all the contracted tissues upon the inside of the sole save the skin, and then apply manual force sufficient to restore the limb, *redressement forcé*, as, even should the calcaneo-scapoid ligaments yield, the trouble would still be subcutaneous, and therefore have

every advantage over an open incision. Failing by these means to strengthen the foot, a wedge-shaped tarsotomy would be performed.

The sections were made, as proposed, with a tenotome, first, of the anterior and posterior tibials, then of the long flexor, and then everything upon the inside of the sole was divided, the tendo achillis being left until near the end of the operation, in order to gain increased power in untwisting the varus. After long and severe stretching, the left foot was brought into good position, and section of the bones was decided unnecessary.

On the right foot, an assistant, who was an exceedingly strong man, applied unnecessary force, and the internal lateral ligament of the ankle was heard to snap, the foot at once sliding a little toward the fibular side. In consequence of this accident, which ultimately, however, proved beneficial in giving a straighter foot than the left one, the tissues upon the inside gave way at the first dressing, opening directly into the ankle joint; but thorough drainage and dressing with carbolized oil succeeded in closing the wound in about six weeks.

Both feet were placed in gypsum splints, which were afterward fenestrated for observation, and later, the author's shoe was applied, tractions, massage, stretchings, etc., being continued for months. The shoe (Fig. 2) acts by elastic force, pulling upward and outward by means of webbing, which exerts its power through the intervention of a catgut cord passing through an eye.

FIG. 3.



As will be seen by Fig. 3, taken from a recent photograph, the patient walks upon the soles of both feet, and although there is slight deviation at the medio-tarsal joints, yet it would scarcely be noticed in the right foot, and in the left does not interfere with walking nearly as much as does the rotation at the knee-joint, which was so marked a feature in this case.

To correct this deviation of the tibia upon its long axis, spiral spring action taking its support from the pelvis (as in the apparatus of Dr. Gregory Doyle) has been tried with some benefit; but no operative procedure promises much success, and the patient is being educated to walk with out-turned toes, which she is perfectly able to do when her attention is fixed. The patient wears an apparatus upon both feet, although she can walk

FIG. 2.



perfectly well upon the right foot without it. She uses no cane, and can easily accomplish a mile. There is rigidity of the right foot, but she climbs stairs without assistance.

Dr. Willard said that when he first saw the patient, he felt that a wedge section would be required, as the deformity was most rigid and extreme. He was now satisfied, however, that the child had better walking feet than she would have had after tarsotomy.

He then reviewed American, English, German, and French authors (these quotations will be published in the *Transactions of the Pennsylvania State Medical Society*), showing that the majority of patients, after section of the bones, either walked with the aid of apparatus, or had very rigid feet, or required further interference surgically, so that after running the risk of a serious operation, which had destroyed several lives, they were really in no better condition, and had not as flexible feet as those who had been the subjects of tenotomy and stretching.

Tenotomy was a safe operation, and after tedious resistance had been overcome, he was not afraid to use what some might call extreme force, since the rupture of a ligament, or even the fracture of a bone subcutaneously, was a small matter compared to the opening of cancellous tissue, and the starting of an inflammation in the tarsal joints, which are so prone to destructive change.

Antisepticism had undoubtedly rendered the operation far safer than in former times, but the risks of subsequent caries could not be wholly avoided.

Davy had certainly been exceedingly fortunate in his twenty-two cases reported up to June, 1882, with but one death from septicæmia; yet even four and a half per cent. of deaths was great when compared with the innocuousness of tendon division. One certainly could not see sufficient reason for his risking so serious an operation upon an infant sixteen months of age, in whom the bones could not yet have become wedge-shaped

from walking pressure, and in whom *redressement forcé* would probably have secured an excellent result. The intelligent exercise of even great force, when regulated by the hands of a practiced surgeon, would seldom produce serious injury.

The speaker then quoted from several authors as to the extent to which such force could be carried. Subcutaneous section of the calcaneo-scaphoid, and other, tarsal ligaments, as practiced upon other articulations of the body in old dislocations, etc., would be preferable to open incision as performed by Phelps and Post.* In adults, where the bones had become badly distorted and wedge-shaped, in which cases there had formerly been only two courses of treatment to be pursued, *i. e.*, either the "let-alone policy," as advocated by Guérin,† or amputation, Dr. W. believed that tarsotomy offered a decided advantage; but in children under ten, he would thoroughly test the virtues of powerful force, associated with subcutaneous sections, before resorting to the graver expedient. Not every case that has relapsed after tenotomy, was incurable, since kind(!) parents frequently defeat the best efforts of skilled surgeons. It was in these cases of rebellious parents that plaster of Paris has proved a most useful assistant, taking the control of the case entirely out of the interference of patient or friends.

As regards the forms of operation, *i. e.*, partial anterior tarsotomy, or excision of the cuboid; complete anterior tarsotomy, or wedge-shaped incision by saw or chisel; and posterior tarsotomy, or resection of the astragalus, the speaker believed that as both the former and the latter were uncertain and often insufficient in results, that in those cases where the operation was demanded it should be complete, the wedge being so shaped that it should present two bases, one looking outward, the other toward the dorsum, in order to preserve to a certain extent the normal arch of the foot.

In the eighty (80) operations upon sixty-eight (68) patients which he had collected, wedge-shaped tarsotomy was done fifty-eight (58) times upon 50 cases, with 3 deaths; the astragalus was resected 13 times on 11 patients, with no deaths; and the cuboid, 9 times in 7 patients, without a death. One patient died of septicæmia, one of hospital gangrene, and one of an old and serious heart complication. It has been well remarked that this operation should be viewed in two lights—one as regards its danger, the second in relation to its ultimate results in giving useful feet.

The conclusions drawn were:

1. In children under ten, even in extreme degrees of deformity, powerful manual force, with subcutaneous division of the contracted tissues, will restore the foot without section of the bones, and should be first attempted. The degree of force required may be great, but even if carried to rupture of the tarsal ligaments still leaves the injury subcutaneous.

2. Fixation in the straightened position is best maintained by plaster-of-Paris dressings for a few weeks, after which daily stretchings will give a more pliable and better walking foot than is obtainable after tarsotomy.

3. Cases should not be considered incurable by moderate means, simply because they have relapsed after imperfect treatment. Careful supervision may still accomplish a good result.

4. Tarsotomy is a valuable operation in old cases wherein the bones have become wedge-shaped and irreducible. It should always be done antiseptically, and the removal of a wedge-shaped piece by saw is preferable to excision of either cuboid or astragalus.

5. Three deaths in fifty-eight cases of tarsotomy shows the great danger of the operation as compared with tenotomy, in which there have been scarcely that number of fatal results in the thousands of cases operated upon.

Dr. Joseph B. Potsdamer followed with a paper entitled,

BRONCHITIS AND PNEUMONIA OF RHEUMATIC ORIGIN,

in which he said that the most voluminous writer on this subject is Dr. Thos. H. Buckler, of Paris. Laennec described this affection under the term "dry catarrh." Trousseau, in his "Clinical Medicine," vol. 2, page 663, ed. 1873, Philadelphia, gives a description of rheumatic pneumonia.

The anatomical seat of this disease is in the white fibrous tissue of the bronchi, which is inflamed. It does not affect the mucous membrane primarily. Pneumonia is always secondary to rheumatic bronchitis, and may occur in the same lung. Proper rheumatic treatment will often save the patient. Further, it bears a direct relation to general rheumatism and rheumatic endocarditis.

In pneumonia there is congestion of the capillaries of the depurative circulation. On the other hand, congestion or inflammation of the bronchial structures affords an example in which the capillaries of the nutritious arteries and veins are involved.

The symptoms of the acute variety of rheumatic bronchitis are profuse, irregular sweats, inordinate sensibility to cold, transient and irregular flushings of the face, and either a constant or a paroxysmal and unproductive cough. pulse and respiration not much altered. Pain most constant on coughing. Rheumatic bronchitis degenerates into a chronic form, with dry cough, rapid respiration, and occasionally aerated mucous expectoration. Auscultatory signs are negative, except an occasional sibilant râle. The diagnosis is usually made by exclusion. Supervention of cardiac disease is of great value in diagnosing the present affection.

In rheumatic pneumonia there is almost always a premonitory cough; in idiopathic pneumonia there is none. Rheumatic bronchitis is a most insidious disease, going on for months, at times with no further annoyance than is produced by a dry cough, occasional slight chest pain and soreness, the patient feeling no indisposition, having a good appetite, sleeping well, and attending to business as usual. Symptomatic pneumonia is always preceded by rheumatic bronchitis. It may present all the symptoms of idiopathic pneumonia, but what gives it its distinctive character is, that all the symptoms of pneumonia may suddenly disappear without the gradual decrease observed in inflammatory pneumonia, and it is usually confined to a smaller section of the lung tissue.

*New York Med. Record, 1881, xx., p. 337.

†Bull. Acad. Méd., Paris, 1882, p. 1039.

The prognosis is favorable, provided the disease is recognized early, otherwise the pneumonic process may go on and the patient succumb, or the lung may break down and the patient eventually dies of consumption.

The treatment is the same as is indicated in acute rheumatic affections elsewhere. Salicylic acid and its salts or phosphate of ammonia being given, when uric acid and urates are found in the urine; lemon juice, when phosphates are present.

The next paper was on

CHRONIC ARTICULAR OSTEITIS OF THE KNEE-JOINT.

Dr. A. Sydney Roberts, of Philadelphia, read a paper on this subject, in which he said that he had chosen the term chronic articular osteitis as the one best expressing the pathological condition found in those lesions of epiphyses of the knee-joint that have usually been described by the older writers under the caption "Tumor Albus."

His reason for so doing has been by proper classification to refer directly to inflammation of the cancellous structure of bone, thereby avoiding the confusion that usually exists if the more general terms *arthritis* or knee-joint disease be employed. Before considering the main feature of the paper, viz., to bring before the Society a new mechanical splint, designed for the treatment of chronic articular osteitis of the knee-joint, Dr. Roberts hastily reviewed the etiology and pathology of the affection.

To meet the universally-recognized principles of treatment, *i. e.*, fixation of the joint and extension, he has designed the splint that he now feels justified, from the success that has attended its use, in presenting to the profession. It consists of two light steel padded troughs, that are firmly secured to the limb by encircling bands of surgical webbing, affording absolute fixation to the joint, when the extending rods are locked after adjustment. Three ratchet extension bars arranged in the form of a triangle are placed posteriorly corresponding to the long axis of the limb, placing within the control of the surgeon a power that will overcome the flexion and the tendency to the production of deformity, and at the same time produce extension. The extension rod acts directly upon the head of the tibia, and parallel with the line of contraction of the flexor group of muscles, obviating thereby the error in the mechanical arrangement of the popular Stromeyer's splint, or in all where the power is applied low down on the tibia to overcome flexion.

After which the Society adjourned.

In the evening receptions were held by Drs. P. D. Keyser and John B. Roberts.

Adulterated Butter and Cheese in New York.

The New York Legislature has just passed the bill which has been under discussion for some time, prohibiting the sale or manufacture of all adulterations of butter or cheese. It is to take effect on July 1, 1884.

The careful investigation carried on by the committee of the Legislature brought out many curious and disagreeable facts. It was shown that the manufacture of oleomargarine might be cleanly, and the articles used not unhealthy; but that in many cases this was not true. It also appeared

that it was often difficult to detect the difference between genuine butter and oleomargarine, except by the use of chemicals, and that oleomargarine was never sold under its real name, but as real butter. It was therefore recommended that the manufacture and sale be absolutely prohibited, as all attempts to regulate the business had failed. A bill embodying this recommendation was introduced, and has now passed both the Assembly and Senate.

The Woes of Importing Chemists.

A number of the importing firms of New York city dealing in dye stuffs, chemicals, and drugs, have sent a memorial to Congress requesting that an investigation be made as to the methods of doing business carried on in the Appraiser's Department of the New York Custom House. They claim that their business is delayed and made harassing and expensive by the reckless charges of under-valuation preferred against them by the custom-house officials—charges which have always been shown to be groundless. They state that they are unable to get possession of their goods after the custom-house has gotten hold of them, except after long delays, and that it frequently happens that goods needed for speedy delivery are held one, two, or three months. In some cases the importers are put to heavy loss because they are unable to fulfill their contracts. The custom-house officers deny these statements, and claim that their action was necessary to prevent frauds on the revenue. It is thought that an investigation will be ordered by Congress into the whole matter.

Items.

—In 1878 the importation of quinine was 17,549 ounces; in 1883 it was 1,055,764 ounces.

—At the recent convention of cane growers at Topeka, Kansas, it was shown that during 1833 Kansas surpassed all the other States in the Union in the production of sorghum sugar.

—It is asserted in the *Pharmaceutical Record*, May 1st, that if bees are kept in any locality where aconite grows, and collect the sweets from its flowers, such honey will exhibit the poisonous quality of that drug.

—Hogs in and around Denver have been dying in great numbers from lung disease. The appointment of a swine inspector at Denver is talked of, as it is supposed some of the diseased animals were disposed of there for human food.

—The American government has received an invitation to participate in an exhibition of dairy products at Munich, in October, 1884, under the management of the General Committee of the Agricultural Union of Bavaria, in connection with the Bremen Dairymen's Union.

—A western editor received a letter from an indignant subscriber, who said: "I don't want your paper any longer." To which the editor mildly replied: "That is all right. I wouldn't make it any longer if you did, because in that case I should have to buy a new press. The present length just suits me, and I am glad it suits you." It is to be hoped this "soft answer turned away wrath."

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

WORK OF WOMEN PHYSICIANS IN ASIA.

BY MARY H. STINSON, M. D.,

Of Norristown, Pa.

(Continued from page 652.)

Since 1869, there have been sent to India 15 women medical missionaries, one for each year since that time.

By The Woman's Bd. of For. Miss. of the Pres. Ch.....	1
" " " " " Am. For. Miss. (Congts.).....	1
" " " " " Union Miss. Society.....	2
" " " " " Lutheran Church.....	1
" " " " " Woman's For. Miss. of the M. E. Ch.....	5

I have received replies from five of these medical missionaries to inquiries concerning the diseases of women and children. The diseases of the latter seem to be about the same as with us, but of a milder type. They do not mention scarlet fever or diphtheria, but eczema is much more common, and there is some leprosy and dengue among them. Concerning the age of puberty it was difficult to be exact, as few knew their ages, but nine to fourteen years were the extremes mentioned. Mothers of thirteen and fourteen years were common. Their children were very small, but appeared healthy. Infant marriages were deplored. These often caused the wife to go to live with her husband before puberty—always as soon as the menses have occurred, when she becomes the slave of the mother-in-law. A large majority of the boys in the high school are fathers. What would you expect to be the mental capacity of the children of these boys and girls? There are now in India 21,000,000 of widows, many of whom are widows by the death of the

boys to whom they were betrothed in early childhood and were never married, but yet have to live under all the abuse and cruelties that are permitted to be heaped upon widows.

Labor was considered tedious and painful as a rule. Two reported the employment of midwives to be so universal that they had never been called to such cases.

Rupture of the perineum was very frequent, that of the cervix uteri less frequent. Diseases peculiar to women were of the same general character as at home, but aggravated by bad treatment during and after parturition, and by subsequent neglect.

Neuroses and insanity do not appear to be very frequent. Puerperal cases had been seen. Hard work and an undue anxiety to be mothers of sons were given as possible reasons thereof. The birth of daughters is a dire calamity.

To the question, "What provision is made for the care of the insane?" came, "Hospitals are provided." "The provision by the English Government is very primitive." "Government asylums badly kept."

Dr. Anna S. Kugler, late assistant physician in the Woman's Department of the Southeastern Hospital of Pennsylvania, who had been only a short time in Gunttoor, India, had learned of but one hospital for the insane in southern India, which was located in Madras. This she had visited, and was much pleased with its management, and they were having excellent results from the open door system.

In 1874, we should note two events: "The Medical Prayer Union" was established in London, which in 1878 numbered 220 doctors and

medical students. They met weekly for prayer and the study of the Bible. Also, when the University of Edinburgh was closed to women, the remedy was sought in the founding of "The London School of Medicine for Women," which was opened in October, 1874. Obstructionists prevented women being admitted for examination by the various medical boards until 1876, when an act to empower all medical boards to admit women became law. The Irish College of Physicians took the initiative, and within the last seven years 38 women have obtained diplomas from this college.

In 1878, the University of London, after a severe contest among its own members, agreed to admit women to its medical degrees. This led ultimately to their admission to all the faculties, and "it is understood that when certain new arrangements are completed between the Royal College of Physicians and of Surgeons of England, the admission of women to their examinations will be included in the programme, and this event will certainly give the final blow to the policy of male monopoly in medicine."

The course of study and of examination is very protracted in the University of London, and it is a very great satisfaction to be able to record that already three women have graduated as "M. B. Lond."; and that in two cases the golden medal of the University has been awarded to women, after competition with all the students of the year—in anatomy to Miss Helen Prideau in 1881, and in obstetrics to Mrs. Scharlieb in 1882.

One of these graduates of the London School of Medicine for Women, Miss Jane E. Waterson, M. D., is the first woman medical missionary sent into Africa, "that garden of the Lord in the wilderness, where the worship of God has been begun, schools opened, the slave trade suppressed, and the faith of the natives won."

Four of these graduates are practitioners in India: Bombay, Calcutta, Lucknow, and Madras.

A philanthropic citizen of Bombay has collected £26,975, and has the promise of £13,504, for the purpose of founding a hospital for women and children, the expenses of conducting the same, and to pay the salaries of one or two lady physicians. A large and influential committee, representing every section of the community, was organized for the purpose of promoting the object in view. This committee have invited Miss Edith Pechey, M. D., a graduate of Berne, but registered in London, to enter upon practice in Bombay, and to take charge of the Hospital for Women and Children, "with a liberal salary and excellent residence." The corner-stone of the hospital

was laid with great éclat, by H. R. H. the Duke of Connaught.

"While a majority of the Calcutta Medical College consider that the requirements of the country point rather to the provision of educated midwives and nurses than to full-blown lady doctors, the government of Bengal has assumed the responsibility, and thrown open the medical college and hospital to females. One young lady, B. A. of the Calcutta University, is now enrolled as a regular student.

"In Madras, lady students were admitted to the medical college in 1875 under special rules." One of these ladies was Mrs. Scarlieb, who obtained the "M. B. Lond." of the London University, and its gold medal, in 1882. It is now proposed to place her at the head of a hospital for women and children in Madras.

"Women in India have obtained liberty and encouragement to qualify themselves, under the same circumstances and advantages as men, for the practice of the profession of medicine, and the state is prepared to sanction their doing so."

The editor of the *Journal of the American Medical Association*, after reading such comments and such able editorials on this subject as appear in that country itself, writes: "We are suddenly, but satisfactorily, awakened to the fact that perhaps we are as green in our knowledge of that country as a Hatch or a Villiard Englishman is of this."

"The Woman's Foreign Missionary Society of the M. E. Church" has voted to raise \$25,000 for the establishment of the first woman's periodical in India. David C. Cook, of Chicago, has given a \$2,200 Cottrell steam printing press to the *American Mission Press* in India. This will be the first steam printing machine, except those of the government, in use in India.

Sir John Lawrence, who entered the lowest class of the English Civil Service in India in 1830, and rose through all its gradations to be Viceroy in 1863, said: "I believe, notwithstanding all that the English people have done to benefit India, missionaries have done more than all other agencies combined."

BURMAH.

Rev. E. P. Dunlap, of Siam, when urging an increase of the number of medical missionaries, wrote: "Even while the heathen, through prejudice, stand aloof from the preacher, they will seek the physician more and more after he has performed some of those cures which, to them, seem almost supernatural."

There are but two women medical missionaries

in all British Burmah, both under the Woman's Baptist Foreign Missionary Society. Mrs. Douglass, M. D., in Rangoon, who is turning her medical work to good account as a means of access to the people. "Oh! for workers among the Burmans. There is an eagerness to hear the living word among the dwellers in the jungles."

In Maulmain, Dr. Ellen E. Mitchell has been assisted by a native Christian, Dr. Shaw Loo, who has greatly relieved her in some departments, and reached families, both as a physician and as an evangelist, in a way which she could not. Her patients were from eight different nations or tribes, with almost every disease that could be mentioned, though fevers, ophthalmia, coughs, rheumatism, diarrhoea, dysentery, and various skin diseases, were the most common complaints. Nearly the whole work has been gratuitous. Medicine has done much towards opening doors otherwise closed to us.

CHINA.

The portion of the great empire of China into which women medical missionaries have been sent, lies along the eastern coast at intervals from 23° to 41° north latitude. Peking, the capital, being 40°, and in but 10° of its 40° of longitude.

We are not aware of any regular system of medicine in China. Medical knowledge is rather an heir-loom. Knowledge of the virtue of certain remedies is handed down from sire to son and maintained a secret; thus producing specialists in the use of herbs, skins of reptiles, charms, amulets, superstitious and idolatrous practices. Regular medical education is unknown, yet every scholarly man is more or less a physician. The Chinese know nothing of hygiene. Filth and vermin encompass them as with a garment.

The London Missionary Society sent Robert Morrison, a practicing physician, to China in 1805. In 1829, Dr. College was stationed at Macao. The Scotchman Dr. James Henderson's medical work in Shanghai, is one of the most interesting on record. The American Board of Foreign Missions appointed the Rev. Peter Parker, M. D., a medical missionary in 1834. He opened an ophthalmic hospital in Canton, which was the forerunner of all subsequent hospitals.

In 1844, the Presbyterians founded a mission in Ningpoo, with Dr. D. Bethune McCartee, of this State, as medical missionary, who remained in China until 1872. He then removed to Japan for some years, and now has returned to this country. Dr. McCartee wrote me that he had never heard of a case of scarlet fever or diphtheria during his residence in China. He had never been called to

more than four or five obstetrical cases in all that time. He had sent preparations of ergot in cases of flooding, and only prescribed in women's diseases at second hand.

Restraint, "chains and cells in the houses of relatives," was the only treatment for the insane he had ever heard of.

The mortality of parturient women was large. "A female physician would, of course, have a great advantage among those of her own sex in China, over a male physician."

Another Presbyterian mission was established in Canton in 1854, with John G. Kerr as medical missionary. Owing to the peculiar social customs of the Chinese, and their views of propriety, men medical missionaries have done nothing comparatively for suffering women. Woman's medical work was begun in Peking in 1873 by Dr. S. Combs, sent by the Philadelphia Branch of the Woman's Foreign Missionary Society of the M. E. Church. Dr. Combs prosecuted her work in the midst of great difficulties, but with much success in winning the hearts of the Chinese women. During the first year, she prescribed for 374 cases, and 37 were treated in their own homes. In closing her report, she says: "I have treated with general success a sufficient number of cases to make me feel that the work is well begun."

A hospital building was completed in 1875, by which time she was able to do without an interpreter. In the annual report of 1876, I find, "the medical work in charge of Miss Combs, M. D., is eminently successful. She is kept exceedingly busy with out-door, as well as hospital practice." "Many would have been discouraged by the difficulties to be overcome in establishing medical work, but Miss Combs' love of her profession, her untiring zeal and her unwavering faith, have carried her triumphantly through the pioneer years of a medical missionary." "Medical work has won its way through her quick, persistent methods in this old heathen capital." "After nearly five years of efficient service, she moved to Kiukiang."

Dr. Combs was followed by Miss L. Howard, M. D., a graduate of Michigan University. She took charge of the hospital in July, 1877. In May, 1878, Dr. Howard wrote: "From July, 1877, to March, 1878, during these months dispensary patients numbered 1612, out-door patients 50, and 10 have occupied the wards. Among the out-patients I have found many in a very destitute condition, having neither food, fire, nor clothing."—"The people invariably treat me with respect, and seem grateful for the smallest favors."—

"About this time famine prevailed throughout North China, when many thousand natives died ; pestilence followed."—"A number of missionaries were seized with the malignant fevers, and died." Dr. Howard wrote: "There has been a great deal of sickness among the missionaries, and for a time I was the only physician in Peking. I did not fear the contagion, though it was terrible. We could hardly go on the streets without seeing the dead and dying, lying just where they happened to fall."—"The last three months have brought sad days to the North China mission." The report said, "Dr. Howard's courage never failed her in all these days of trial, when death was on every side, but her physical powers were greatly taxed." She reported "2015 day patients, 80 out-door patients, and 18 having occupied the wards for the entire year."

In the fall of 1878, medical work was suspended in Peking, by Dr. Howard being called to Tientsin, the seaport of the province, eighty miles distant by land and one hundred and twenty miles by water.

The way for this change was brought about by providential circumstances beyond her control. When Gen. Grant and his party were visiting in Tientsin, in June, 1878, they were entertained several times by the Viceroy, Li Hung Chang, the Governor-General of the province, next in authority to the Emperor, and the leading statesman in the Empire. His wife, Lady Li, gave an evening entertainment to the wives of the resident officials. A lady of the mission accompanied Mrs. Grant as interpreter. When a few weeks later Lady Li was very ill and given up to die by the native doctors, the Viceroy, being in sore distress at the prospect of losing his wife, in opposition to the prejudices and principles of the Chinese, yielded to the persuasions of the United States Consul (who was the private secretary of the Viceroy), and sent for the foreign physician of the city and the medical missionary of the London Missionary Society. These carried Lady Li safely through the immediate peril, but they, as men physicians, could not diagnose the case of a lady patient. Both doctors united in petitioning the Viceroy to send for Dr. Howard, and the possibility of saving his wife enabled him to set at naught all Chinese ceremonies. A courier was dispatched with a request to Dr. Howard to come, and a steam launch sent to meet her to hasten her arrival. Happily, the disease of Lady Li yielded to the medication of Dr. Howard ; and soon Lady Li learned not only to appreciate Dr. Howard's medical skill, but to feel for her a ten-

der regard. Strong inducements were held out to persuade Dr. Howard to remain in Tientsin. Apartments were fitted up in one of the temples of the city for a dispensary by the Viceroy, and Lady Li became responsible for its support.

Miss Howard's associate wrote: "We know not how much this is for China, but it looks like a big wedge in very near the throne."

Dr. Howard wrote, March 21, 1879: "I commenced work in the dispensary about the middle of October, 1878. Up to the present time, I have treated 310 patients in the temple, and visited 120 patients in their homes."—"I live about three miles from the temple, in the foreign settlement, where I have treated over 1,000 patients and have visited seventeen patients in their houses. We consider this the most important part of our work."—"I am called to the houses of the highest officials ; their prejudices are breaking down everywhere over the land."—"Patients come from the interior and take up their residence near the temple, that they may be treated."

Rev. H. H. Lowery wrote: "The importance of the present opening can scarcely be overestimated. Dr. Howard's attendance upon the Viceroy's wife has made an opportunity such as never occurred in China before, and if lost now, may never occur again. The homes of many of the best and most influential of the city are open to the visits of your physician."

Dr. Aker was sent to Dr. Howard's assistance in 1882. In the annual report for 1883 were found the following numbers:

Of patients in wards	92
Of out-door patients	903
Of Missionary Dispensary	8,338
Perscriptions given	29,657

FOOCHOW.

In October, 1874, Miss Sigourney Trask, M. D., of Spring Creek, Pa., a graduate of "The Woman's Medical College in Philadelphia," was sent to Foochow by the New York branch of the Woman's Foreign Missionary Society of the M. E. Church. The number of patients treated the first year was 554, and 36 surgical operations. In April, 1877, a commodious, well-arranged hospital was ready for use. The first patient registered in it was a woman of 28 years, who had not walked erect for five years, on account of an injury to her knee. This resulted in ankylosis, with flexion at nearly a right angle. Dr. Trask made a resection, the limb was straightened, a good recovery made, and in three months the woman returned to her home, 60 miles from Foochow.

A little girl of 15 years had both legs ampu-

tated below the knees successfully. The mother of this girl's betrothed husband was greatly disturbed by her recovery. *

A pretty, bright young woman with bound feet, having a terribly ulcerated leg, was improving so that Dr. Trask hoped amputation would not be necessary.

A large tumor having been removed from the back of a woman, her husband said: "I had made offerings to many gods, but all to no good for my wife."

Concerning another who had her right arm amputated, Dr. Trask said, "I have but little hope for her."—"I do not think her friends will mourn very much, but rather rejoice."

In 1873, Dr. Trask wrote, "We have had almost 20,000 deaths of natives here in two weeks from cholera. It is a most malignant type."—"During the last quarter I have had 267 dispensary patients, and over 500 prescriptions have been made." The whole number of out-patients registered since 1877 is 1,206. Number of patients admitted into the wards of the hospital was 76.

In 1878, Dr. Julia A. Sparr, a graduate of Michigan University, was sent to reinforce Dr. Trask. Seven years ago Dr. Trask received, under instruction, the first female medical student in Foochow—the first ever in China. Since then five others have been received—six now being under instruction. Letters have been received by the society, asking that at least one of these, Hu Keng Eng, of whose ability, aspirations, and devotion, Dr. Trask speaks in the highest terms, should be brought to this country to remain ten years, if necessary, in order that she may go back qualified to lift the womanhood of China to a higher plane, and there to superintend our medical work; and this young student herself sends an earnest petition to be brought to America. "Shades of conservatism and Confucianism!"

Dr. Catherine Cory was added to the medical staff in Foochow in 1883.

In the annual report of the mission for 1883, I learn that woman's medical work grows steadily in interest and favor in Tientsin, as seen in the following table:

	<i>Patients.</i>	<i>Surgical Operations.</i>	<i>Deaths.</i>
Hospital Dispensary . . .	1,051	66	—
East Street " . . .	1,644	134	—
Bedside	262	60	—
House	58	26	2
	3,015	286	2

We gather from the annual report of 1883 of

the Presbyterian Board of Foreign Missions, that in Canton "another hopeful feature here is that it is reaching the women."—"Three women from the school have commenced Christian work, and one has entered upon the study of medicine."—"The hospital work, under Dr. John G. Kerr, has been greatly prospered. He has had 19,199 out-patients, 1,182 in-patients, and has performed 963 surgical operations. During a part of the year, Miss Mary E. Niles, M. D., of the Nankin Mission, was under his special instruction. Miss Butler is studying medicine, and several natives also have formed a class."

You will remember, Dr. Kerr went to Canton in 1854. Almost a generation has passed before "reaching the women." We are happy to know that the men medical missionaries have welcomed cordially the women physicians to their stations. But I have not noticed any other doctor than Dr. Kerr taking a newly-arrived woman medical missionary under his "special inspection."

We learned upon inquiry of a member of the Baptist Mission in Swatow, nearly in the same latitude, but a little east of Canton, as to the frequency of infanticide, that she had known:

100 mothers who had destroyed 158 female children.

40 mothers who had destroyed 78 female children.

6 mothers who had destroyed 11 female children.

When the mother does not strangle or smother her child by holding a cloth over its face, or by filling its nostrils and mouth with cotton saturated with incense, the child is wrapped in matting and carried by the father and thrown into the river, or into the little window of a walled pit prepared for the reception of female children, where lime is thrown over them. No one asks how the child came to its death. Boys are never destroyed. "A husband reviles or hates his wife if she does not bear sons, and may be legally divorced."

Miss Carrie Daniels, M. D., was sent to Swatow by the Woman's Baptist Foreign Missionary Society recently, and is laying the foundation for woman's medical work.

Dr. Virginia C. Murdock, a graduate of Michigan University, under the auspices of "The American Board of Commissioners for Foreign Missions," in Kalgan, on the mountains, answered my questions fully, but her letter was received too late to allow of more than a few quotations. She says infanticide "is not practiced to any extent."

The death of sons is a sore affliction, that of

daughters a good riddance. Small-pox is considered a regular disease of childhood. A son who has not been vaccinated is not counted as having a lease of life that can be depended on. None would think of having a girl vaccinated. If a cherished son is sick, a doctor is called, but with girls, it is the "survival of the fittest." Cholera infantum is very frequent and fatal. If a mother cannot nurse her child, a wet-nurse is hired. No other way to raise children is attempted. People do not seem to have the patience to care for their sick babies. Burial of the dead is general, but dead female children are often wrapped in a mat and thrown into the street at night, so that dogs may tear them to pieces, hoping that thus their little spirits will be liberated and come back to the parents as sons.

Chinese midwives are quite efficient ordinarily, but in unusual presentations and flooding their arts are at an end. Forceps are not permitted to be used in that locality. Dr. Murdock had been called in a case of post-partum hemorrhage, when she found the woman fainting, but held up by the hair of the head, it being dragged upward by the husband and brother taking turns as they became fatigued. No advice or inducement could be made to them to let go of her hair and allow her to lie down for an hour or two. She lived through it, but, as they thought, only because they adhered to their well-known theories.

A lying-in woman must not leave the house for forty days after her delivery, and must live on slop food all the time. Amenorrhœa was the most frequent disturbance of the menstrual function. Coughs, bronchial and asthmatic, with shortness of breath, very frequent. Dyspepsia universal. "Worms! worms! to be treated for round worms is everybody's fate." Skin diseases and ulcers of various sorts are common. Rheumatism, acute and chronic, not as frequent as might be expected, as the natives wear cotton hose and cotton shoes the whole year, and as their houses have brick floors.

Thirty-six women medical missionaries have been graduated, as follows:

In the Woman's Medical College of Chicago . . .	4
" Michigan University	5
" Woman's Medical College of the New York Infirmary	6
" Woman's Medical College of Penna.	20
Homeopathic	1

The W. F. M. S. of the M. E. Church have sent to India 7; to China 10; to Japan 2.

The W. F. M. S. of the Presbyterian Church have sent to India 2; to China 3.

The W. F. M. S. of the American Board of Com-

missioners of Foreign Missions have sent to India 2; to China 1.

The W. F. M. S. of the Baptist Church have sent to Burmah 2; to China 1.

The W. F. M. S. of the Lutheran Church have sent to Burmah 1.

There are 8 graduates of the Woman's Medical College of Pennsylvania under appointment:

One for Damascus, by the Episcopal Church.

Five for China: 1 by the Episcopal Board, 1 by the Methodist Church South, 1 by the Baptist Church South, and 2 by the Presbyterian Board.

One not determined whether India or China, and one not determined whether Burmah or China.

There are 8 under-graduate missionaries in the class in the Woman's Medical College of Pennsylvania.

As business men judge of the plausibility of a projected scheme by the amount of money that can be raised for its advancement, I thought it might be satisfactory to know what amount these Woman's Foreign Missionary Societies have collected during 1883. I have had access to the treasurers' reports of but four societies, from which I copy the following:

Woman's Baptist Foreign Missionary Society for 1883	\$23,546.70
Woman's Foreign Missionary Union for 1883	53,831.64
Woman's Foreign Missionary Society of the M. E. Church	167,037.50
Woman's Foreign Missionary Society of the Presbyterian Church	169,587.86

Joseph Cook, who has a most comprehensive knowledge of the subject of missions, tells us, "There are three hundred millions of women now on this planet who have only the Buddhist's hope of being born again as men, instead of toads or snakes. There are eighty millions of women in Moslem harems. There are uncounted millions of men, women and children growing up in the most degraded superstitions, and suffering in mind, body, and estate from inherited pagan customs."—"What can be done to help these millions?"—"In China there is not an ordained missionary to-day for a million of people."

In view of these almost stupendous numbers, the work of these Women's Foreign Missionary Societies is but as "playing at missions," and the work of women physicians in Asia as "throwing one pebble into the great ocean of missionary work."

—Doctor—"There, get that prescription filled, and take a tablespoonful three times a day before meals." Pauper patient—"But, doctor, I don't get but one meal in two days."—*Texas Siftings*.

THE TIME REQUIRED BY THE BLOOD FOR
MAKING ONE COMPLETE CIRCUIT
OF THE BODY.*

BY ROBERT MEADE SMITH, M. D.,
Professor of Comparative Physiology, University of Penn-
sylvania.

In a paper published in the *Philadelphia Medical Times* for January 26, 1884, I gave an account of a new method which I had employed to measure the amount of blood thrown out of the ventricles at each contraction, and to determine the time required by the blood for making one complete circuit of the body. I there had occasion to criticise the method which has heretofore been employed to answer this latter question, and to point out some of its defects. I have recently been studying this subject from another point of view, and have obtained some results which strengthen the position taken in the article referred to.

It will be remembered that the method which has been employed for this purpose, the infusion method of Hering (*Zeitschrift. für Phys.*, Bd. iii. and v., and *Arch. für Phys. Heilkunde*, 1853, p. 112), consists in injecting into one jugular vein towards the heart a solution of some salt whose presence in the blood can be readily recognized by chemical tests, and in finding how soon after the injection the salt appears in the blood coming from the head in the corresponding vein on the opposite side of the neck.

When thus injected, to reach the peripheral portion of the opposite jugular vein, the salt must evidently have passed into the right heart, through the capillaries of the lungs, into the left heart, through the carotids or vertebral arteries to the head, and through the capillaries of the head or face to the jugular vein; or, in other words, must have passed through two capillary networks with their arteries and veins. It must, therefore, have completed an entire circulatory revolution. But to conclude that the time elapsing after the introduction of the salt into one jugular vein before it is found in the blood coming from the head in the opposite vein is the time required for one molecule of blood to pass from one of these points to the other, it must in the first place be admitted that the salt has been carried mechanically by the blood, without diffusing through it, with the same velocity as the blood itself; and in the second place, to enable the formation of any opinion as to how often the entire mass of blood passes through the heart, it must be admitted that the velocity thus determined by the infusion method is the mean velocity of the

blood mass. To show that both of these assumptions are unwarrantable is the object of the present communication.

I. *The Element of Diffusion in Hering's Method.*—Poisseeuille (*Ann. d. Sciences Nat.*, 1843, ii. ser. t. xix., p. 30) was the first, and as far as I know has been the only one to offer any experimental proof as to the falsity of the belief that the potassium salt was carried mechanically, as would be an inert body, by the blood. He repeated Hering's experiments on the horse, and was able to confirm his statement as to the time elapsing after the injection of the solution of potassium ferrocyanide before it appeared in the jugular vein of the opposite side; but he further found that this time was different for different substances, and was even modified by the presence of other substances when injected with the potassium ferrocyanide. Thus, while the time required for the circulation of the potassium ferrocyanide was *twenty-eight* seconds in the horse, when a little alcohol, in quantity insufficient to have any appreciable effect on the pulse and blood pressure as measured with the hæmadynamometer, was injected with the potash salt, the time of circulation was lengthened to *forty-five* seconds. Or, when potassium nitrate or ammonium acetate was administered under similar circumstances, the duration of circulation was reduced to *eighteen* or *twenty* seconds. In other words, he found that in the living body the rapidity of circulation of substances mixed with the blood agreed with the rapidity of flow of the same substances through dead capillaries or even through glass tubes.

It is, moreover, well known that if two fluids capable of mixing are brought into contact, they will diffuse into each other with a considerable degree of rapidity, even when the mass of the liquid is at rest, or when there is a great difference in the relative volumes of the fluids; while if one fluid is poured into another with which it is miscible, or if agitated after the two fluids are brought into contact, diffusion is almost instantaneous. And as some force is always employed in injecting the salt solution into the vein, the mixture of this solution with the blood will be promoted, while the motion of the blood renders the conditions still more favorable for diffusion.

The assumption is, therefore, a fair one, until subjected to experimental disproof, that the element of diffusion forms a considerable item in the rapidity with which solutions of salts complete the circuit of the body. As far as I know, however, no such proof has ever been advanced, and the direct experiments which I have made on this

*Read before the College of Physicians of Philadelphia.

subject serve rather to confirm than to disprove this assumption.

It is evident that if any particulate, inert substance, small enough to pass through the capillary networks, and capable of ready recognition, could be injected into the blood, there could be no question as to the element of diffusion in the time required for such a substance to complete the circuit of the body; its velocity of movement must be the velocity of the current in which it moves; and if more time is required for the circulation of such a body than for the salt solution, it will be evident that some force other than the propulsion of the blood is concerned in the movement of the salt. These conditions I believe to be filled in employing pigeon's blood as the body whose transit is measured.

The red blood corpuscles of the pigeon have a short diameter smaller than the diameter of mammalian blood disks; and as all red blood corpuscles pass edgewise, and oval corpuscles (as in the frog) pass endwise in the centre of the blood stream, it is probable that the pigeon's corpuscles will circulate in mammalian blood-vessels with their long diameter in the axis of most rapid movement. They therefore agree with the first requisite as to size.

In the second place, they are oval and nucleated, and so form such a strong contrast to mammalian blood disks that a single pigeon's corpuscle in a drop of mammalian blood can be found under the microscope with the greatest readiness.

It might at first be seen, however, that pigeon's blood injected into the vessels of a mammal is by no means an inert substance. It was proved in the earlier operations of transfusion that the blood of one species of animal is a direct poison for other species. When the blood, whether defibrinated or not, of one group of mammals is injected into the vessels of another of the same class, but of different species, the corpuscles of the injected blood rapidly disappear, the plasma becoming red from the liberated hæmoglobin, which, when large quantities of blood are injected, may pass off through the kidneys, causing hæmoglobinuria, or even into the mucous and serous secretions; while at the same time the corpuscles of the animal receiving the injection, if they are themselves soluble in the injected blood, break down, and, as a consequence, convulsions and death through asphyxia may result.

The resistance offered to these phenomena differs in different groups of animals; thus, the dog, of all animals, is least liable to dangerous symptoms following the injection of blood from a

different species. There is still another complication to be noted. Before the corpuscles are dissolved they tend to run together into heaps and so cause emboli, while again the liberation of hæmoglobin is likely to cause thrombosis.

It would seem from the above that pigeon's blood, which was also found by Bischoff to provoke analogous symptoms when injected into mammals, is by no means an inert substance, and is therefore entirely unfitted for the use I have made of it. Such is not, however, the case. The production of the symptoms mentioned above is a question of minutes; the duration of the circulation one of seconds; and I have found by direct experiment, as will be shown later, that the circulation is completed before disorganization commences.

There is one difficulty, however, that must be guarded against. The solution of the pigeon's corpuscles occurs not only in the vessels of the dog, the animal on which most of my experiments were made, but also after blood had been drawn and exposed to the air. Therefore, if the corpuscles are not sought for within a very short time after the withdrawal of the blood, they will only be found with great difficulty, and sometimes not at all, though it may be that their presence in the same portion of blood was proved only a few minutes before. To avoid error from this cause, Dr. Gray, the Assistant Demonstrator of Histology in the University, kindly examined the blood for me the instant that the collection was made, and before alteration had commenced. Such a procedure is not, however, absolutely necessary, as the first change in the corpuscles is their loss of hæmoglobin and consequent transparency, while the cell wall disappears still later, and the nucleus remains unchanged for some time. If, therefore, a little aniline red is added to the drop of blood under examination, pigeon's corpuscles, otherwise almost invisible, can be readily recognized.

Method of Experiment.—Two pigeons were killed by decapitation immediately before the experiment, and their blood collected in a dry porcelain dish and thoroughly defibrinated by whipping with glass rods; the blood was then filtered through a fine linen cloth moistened with half per cent. salt solution (water was avoided so as to preserve corpuscles unaltered).

The animal to be experimented on was then tied and etherized, and glass canulæ, of the same calibre as the vessels, were inserted into the external jugular veins, in the left directed towards the heart, and in the right towards the periphery, the flow of blood being prevented by spring clips.

A canula was then inserted into the femoral artery, and connected with a mercurial manometer writing on the kymographion.

The canula in the right external jugular vein was connected by means of a piece of rubber tubing about 4 centimeters long with a glass stopcock by which the outflow of blood could be regulated to about the amount normally passing through the vein.

The apparatus for collecting the blood and for noting the time of each collection consisted of a horizontal glass disk 31 centimeters in diameter, which could be uniformly rotated by clock-work at any desired speed. Twenty-four watch-glasses, each about two cm. in diameter, were fastened by sealing-wax around the edge of the disk, and the apparatus was so arranged that as the disk rotated, the centre of each watch-glass passed under the stopcock connected with the right jugular vein.

The time was recorded in the following way: The entire disk, with the exception of the border on which the glasses were fastened, was covered with a layer of lampblack, and an electro-magnetic lever so arranged that as the disk revolved it would describe a concentric circle on the smoked surface. This electro-magnet, with a similar lever writing on the drum of the kymographion, was included in an electric circuit broken every second by a second's pendulum. Each interruption of the circuit, therefore, made a mark simultaneously on the revolving disk and on the moving paper of the kymographion. The apparatus was further so arranged that a single movement started the revolving disk, and at the same time made a mark on the already revolving drum of the kymographion. The orifice of outflow from the stopcock, and the time lever, were on the same radius of the disk.

A syringe containing 10 c.c. was then filled with the defibrinated pigeon's blood and bound in the canula, previously filled with the same blood, in the left external jugular. After all connections were made, the kymographion was started and allowed to revolve for twenty or thirty seconds before making the injection, so as to get a normal pulse and pressure curve. The clip was then removed from the right jugular vein, and as soon as the blood commenced to flow from the glass stopcock, the clip was removed from the left jugular, the injection made, and the disk started simultaneously—the instant of starting the disk being also automatically recorded below the pulse line on the kymographion.

When all the cups were filled with blood the

disk was stopped, and the blood instantly examined microscopically for the presence of pigeon's corpuscles. When it was determined in which glass they first appeared, it was only necessary to count the number of breaks in the time line on the disk from this glass to the start to determine how many seconds were required for the pigeon's corpuscles to pass from the left jugular vein to the right—while by laying off on the kymographion tracing the same number of seconds from the starting of the disk, the number of pulsations in that period was readily determined, and also whether the injection produced any disturbance of circulation.

(To be Continued.)

REPORT OF A CASE OF SUCCESSFUL REMOVAL OF THE SPLEEN IN A DOG.*

BY DR. W. J. ASDALE,
Of Pittsburgh, Pa.

To those interested in cases of removal of the spleen, the following case might prove of interest:

In June, 1875, Dr. W. J. Asdale, assisted by Dr. J. J. Todd (since deceased) and Mr. C. J. O'Brien, then a medical student and now a practicing attorney in Pittsburgh, removed the spleen from a one-year-old black poodle dog, weight estimated at fifteen pounds. The animal being put under the influence of ether, an incision three inches in length was made in the median line over the epigastric region; by pressing aside the stomach and intestines, the spleen was easily brought into view. It was removed entire, by detaching it gently from the surrounding parts, leaving only a narrow pedicle, which was then pierced in the centre and silk ligatures thrown around both halves. The pedicle was then severed, and the ligatures cut off short and allowed to remain in the wound. The parts were then thoroughly cleansed, and the abdominal incision closed with six silver sutures. The dog was then permitted to care for himself, being supplied with a very limited quantity of milk. In two weeks, the edges of the wound having united perfectly, the silver sutures were removed. This dog remained around Dr. Asdale's house as a house-pet for nine years. He died in January, 1884. In this case the operation did not seem to change his disposition: he remained good-natured and thrifty. He developed rapidly, his weight at the time of his death being estimated at from twenty-five to thirty pounds. He was a good, active watch-dog, a good

* Reported by Wm. H. Mercur, M. D., Resident Physician West Pennsylvania Hospital, Pittsburgh, Pa.

feeder, never morose or sullen. The greater part of the time he was well nourished; his skin was clean, and his hair smooth and glossy.

He died suddenly, after being exposed to severe cold. The post-mortem, at which I was present, was made a few hours after death. The body was in good condition, and not emaciated. The only pathological lesion found was a severe enteritis affecting the lower part of the small intestines, from which, in all probability, the dog died. His lungs, heart, kidneys, and all his other organs, were perfectly normal. There was not the slightest trace of the spleen, nothing to denote its former locality, no remains of a pedicle, nor anything to show that nature had made the slightest attempt at restitution; its origin was entirely obliterated.

HOSPITAL REPORTS.

BELLEVUE HOSPITAL, NEW YORK.

REPORTS BY J. H. WOODWARD, M. D.

House Surgeon.

Burns and Scalds.

In this report I propose to consider the subject of the management of burns and scalds. They are always injuries which subject the patient to considerable pain, and not infrequently they are severe enough to endanger his life. If they be managed according to certain methods, not only do they become cases which are disgusting to the attendants, but they are rendered still more dangerous to the patient. There are other methods of treatment, however, which remove the disagreeable features referred to, and which, above all, diminish the danger to life and hasten the healing process. It will be the object of this article to describe, as briefly as possible, the management of these cases as it is followed in this institution at the present time.

Burns were classified by Dupuytren according to the depth of the lesion, and he divided them into cases presenting six degrees of severity. In burns of the first degree, there is only inflammation of the skin. In cases of the second degree, the epidermis is detached and blebs of various sizes are formed. In burns of the third degree, the cuticle and a portion only of the true skin are destroyed. In cases of the fourth degree, the lesion extends through the true skin. And in cases of the fifth and sixth degrees, the burn involves muscles, tendons, nerve-trunks, blood-vessels, and bones.

The cases most frequently met in this institution may be classified under the second and third divisions. Burns of the first and fourth degrees are seen occasionally. Cases of burns extending to the fifth and sixth degrees have not entered this institution during the past two years. And for the reason that such cases have not been treated here during your reporter's residence in

the hospital, the following remarks must not be regarded as relating to such cases.

The constitutional symptoms present in any case will depend upon the power of endurance of the patient and, speaking generally, upon the extent of surface burned. Pain is a constant symptom, and seems to be most intense in cases of the second degree. There is generally some shock at the outset, and it seems to be prolonged by the pain. As a rule, the quantity of urine excreted is diminished from the outset. In many cases during the first week or two, that may become a very serious symptom. In a considerable number of cases, albumen may be found in the urine after the first twenty-four hours, and, in some cases, blood may also be found there. During the first week the temperature may be elevated to 100°-101°. In more serious cases, the temperature will range from 100° to 103° for five or six days. The heart generally requires stimulation. The patient will emaciate very rapidly, even when the burn appears to be of moderate severity only.

When the burn affects a large area of skin, whether it be of the first, second, or of any degree, the prognosis must be very guarded. The presence of albumen or blood, or both, in the urine should be regarded as a grave symptom. Of all the cases of death from burns that have come under my observation, a certain number have died of shock within forty-eight hours. But a larger number have perished at a later period. Those cases have perished after presenting the following symptoms: the urine was diminished very much in quantity and generally contained albumen. The skin was dry and the bowels constipated. The patient became delirious, and after several days he became stupid. The pulse was rapid and feeble. The temperature was above 100° for several days, and, within twenty-four hours of the patient's death, began to rise until some of these cases died with a temperature of 108°. There was failure of the peripheral circulation in the extremities a number of hours before death.

Only one case presented any symptoms of duodenal trouble. And but one instance of ulceration in the duodenum has been found in the autopsy room. That case was one of "frost-bite" of the fingers of both hands.

Having briefly referred to a number of the most important symptoms, we will consider the constitutional treatment. For the pain, morphine should be given hypodermically in sufficient amount to make the patient comfortable. And *tr. digitalis* or whisky may be given hypodermically for the feeble heart-action during the period of shock. As soon as the patient has rallied and can take substances by the mouth, he is given *inf. digitalis*, $\mathfrak{ss}$.; *potassii acetatis*, gr. xv., every three hours night and day. He is put upon a milk diet exclusively. Under that course of treatment, the patients do better than if they are not managed with the object of relieving the kidneys. As soon as the patient is strong enough, a cathartic is administered. And should any suspicion of uræmic poisoning become justifiable, diaphoretics are added to the list of drugs. In one such case I have administered nitrate of pilocarpine, hypodermically, in sufficient amount to excite the action of the skin. The patient improved very markedly after that drug had been administered.

The temperature seldom requires treatment. Although the fever will continue for a number of days, and, although the patient is in poor condition to endure a high temperature, the experience of this hospital seems to be in favor of permitting the fever to run its own course. Antipyretic doses of quinine and cold baths injure a certain number of these patients much more than the febrile movement. Should the temperature begin to rise after remaining pretty steadily about 102 for a number of days, in many cases it would be better to attempt to establish the peripheral circulation in the extremities than to give quinine or a bath. In such cases, the temperature may rise because the circulation is poor in the skin. If such be the case, it is ruinous to give large doses of quinine. Turpentine stupes or flaxseed and mustard poultices applied to the feet fulfil the indications pretty well. For all temperatures in cases of burns it is good practice to avoid the use of all antipyretic agents. In the majority of cases good tonic treatment should be begun early.

For the treatment of the burn itself there are two very popular remedies. They are carron oil and vaseline. But they should be discarded entirely in these cases. Under their use there is profuse suppuration, the room is filled with an odor that is very disgusting, the dressing must be renewed frequently, and the lesion does not heal rapidly. Iodoform ointment (3j. to 3j.) is used in hospital practice often enough, but it is unsuited to the requirements of private work. The odor of the drug is not the sole objection to its use in these cases, however; for it is not difficult to poison the patient with iodoform, when the ointment is applied to deep or extensive burns. A number of cases of such poisoning have occurred in this hospital; but there have been no fatal results thus far.

The requisites of a satisfactory dressing for cases of burns may be enumerated as follows: It should be comfortable to the patient, diminish secretion from the affected part, require to be renewed only at long intervals, and it should promote healing. A large variety of dressings have been tried here, and now the general opinion is fixed upon certain methods, which will be given as briefly as possible.

Suppose that the lesion is one of the second degree. The affected region is covered with blebs of various sizes. These blebs are cut open with a scissors and evacuated. The detached epidermis is cut away carefully. Leaving the epidermis *in situ* after evacuation of the blebs does not seem to offer any advantages, and sometimes such practice retards the healing process. While these manipulations are in progress, the affected member should be irrigated with some antiseptic solution. Bichloride of mercury dissolved in water (1-2000) has been used here very extensively for this purpose. It is too corrosive in that strength, and causes many patients to suffer indescribable agony. I have seen a patient in convulsions on account of the pain, in spite of large hypodermics of Magendie's solution. There are many patients, however, who will not complain of the corrosive mercury. Used upon extensive burned surfaces, carbolic solutions may give rise to poisoning, which should, of course, be avoided in such cases above all others. And, furthermore, they are

irritant, and give rise to a large secretion of serum. Tursch's antiseptic fluid, which contains boracic acid five parts, salicylic acid one part, to water five hundred parts, is not very irritant, and is perfectly effective. It is the best solution for this use. The burned surface is irrigated with that solution and washed gently with sponges. Having thoroughly cleansed and having rendered the burned region as aseptic as possible, we dust upon it a layer of subnitrate of bismuth thick enough to thoroughly protect the part. On this four or five thicknesses of carbolized or bichloride gauze should be wrapped gently. Over all some antiseptic cotton is placed in a thick layer, and bound on gently with a bandage. This dressing will remain perfectly sweet for a week or two. Should serum come through it after a day or two, we cover the discharge with more cotton and a bandage. The part is examined after a week or two, according to the size of the burned district. Usually at the end of one week the burn is examined and found healed throughout. Should a second or a third dressing be required, it is applied under the same rules as the first. It is possible to cite a large number of such cases, and give the details of their management, but it seems to me unnecessary to do so.

Burns of the second degree about the face are very satisfactorily treated with a saturated solution of bicarbonate of soda in water. That is applied by making a mask of sheet-lint for the burned district, which mask is kept constantly wet with the solution. The blebs and epidermis are treated in these cases as in the others. Bismuth powder answers the purpose here very well indeed.

Burns of the third and fourth degrees require another sort of dressing. In these cases the bismuth dressing will become very foul smelling after three or four days. The discharge is much greater than in the former set of cases, and the bismuth salt is not antiseptic, so that the discharges are apt to undergo putrefaction, unless the dressing is renewed every second or third day. Cases of burns of the third and fourth degrees, if extensive, present a great variety of difficulties, and they often require a great deal of skill and patience on the part of the physician for their proper management. It is but to render them aseptic at the onset and to keep them so until they have healed. The Tiersch antiseptic fluid is efficient, and should be chosen for irrigating and washing the parts. The burn should be cleansed thoroughly of sloughs and other dead tissue. Then the dressing may be applied, and it should be of such a nature that it may remain undisturbed for a week or two. Boracic acid crystals may be powdered upon the lesion; or boracic ointment (3j. to 3j.) may be used spread upon antiseptic gauze. If boracic acid crystals are selected, then the lesion is thickly covered with them. Disinfected rubber tissue should then be applied in strips over the acid, and the antiseptic gauze and cotton dressing applied as in cases of the second degree. Granulation is favored and promoted by this treatment, and cicatrization goes on satisfactorily. These large ulcerating surfaces should be skin-grafted as soon as the granulations are in the proper condition for it. After the grafts have been placed upon the ulcer, the boracic acid

may be dusted upon the part and the dressing made as before. Instead of boracic acid or the boracic ointment, a powder composed of equal parts of subnitrate of bisnuth and iodoform may be used to accomplish the objects in view. I am inclined to think that this powder promotes healing more satisfactorily than any other dressing I have seen used in these cases. There is very little discharge, and cicatrization proceeds very rapidly.

In any case of deep and extensive burns, considerable time must elapse before healing is complete. The patient is confined to bed, and that alone is sufficient to lower his vitality. It is very necessary, therefore, that the discharges should be reduced to a minimum quantity. For the attainment of the objects in view, the closed dressings which I have described in this paper are the best that have been used in this hospital.

By the employment of them the mortality has been diminished, and the period of healing very much shortened.

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

(Continued from page 655.)

Probably amongst the palsies may be considered the disturbances of the renal functions, which are rarely met with in cerebral syphilis, and which are probably usually dependent upon the specific exudation pressing upon the vasomotor centres in the medulla. Fournier speaks of having notes of six cases in which polyuria with its accompaniment, polydipsia, was present, and details a case in which the specific growth was found in the floor of the fourth ventricle. Cases have been reported in which true saccharine diabetes has been present (Consult. Servantié, *Des rapports du Diabète et de la Syphilis*. Paris Thèse, 1876), and I can add to these an observation of my own. The symptoms, which occurred in a man of middle age with a distinct specific history, were headache, nearly complete hemiplegia, and mental failure, associated with the passage of comparatively small quantities of a urine so highly saccharine as to be really a syrup. Under the influence of the iodide of potassium the sugar in a few weeks disappeared from the urine.

Epilepsy.—Epileptic attacks are a very common symptom of meningeal syphilis, and are of great diagnostic value. The occurrence in an adult of an epileptic attack, or of an apoplectic fit, or of a hemiplegia after history of intense and protracted headache, should always excite grave suspicion.

Before I read Prof. Fournier's work on Nervous Syphilis, I taught that an epilepsy appearing after thirty years of age was rarely, if ever, essential epilepsy, and unless alcoholism, uræmic poison, or other adequate cause could be found, was in nine cases out of ten specific; and I therefore quote with satisfaction Prof. Fournier's words: "L'épilepsie vraie, ne fait jamais son premier début à l'âge adulte, à l'âge mûr. Si un homme adulte, au dessus de 30, 35 à 40 ans, vient à être pris pour la première fois d'une crise épileptique, et cela dans la cours d'une bonne santé apparente, il y a,

je vous le répète, lui, ou neuf chances sur dix pour que cette épilepsie soit d'origine syphilitique."

Syphilitic epilepsy may occur either in the form of petit mal or of the haut mal, and in either case may take on the exact characters and sequence of phenomena which belong to the so-called idiopathic or essential epilepsy. The momentary loss of consciousness of petit mal will usually, however, be found to be associated with attacks in which, although voluntary power is suspended, memory recalls what has happened during the paroxysm; attacks, therefore, which simulate those of hysteria, and may lead to an error of diagnosis.

Even in the fully developed type of the convulsions, the aura is only rarely present. Its absence is not, however, of diagnostic value, because it is frequently not present in true essential epilepsy, and it may be pronounced in specific disease. It is said that when in an individual case the aura has once appeared, the same type or form of approach of the convulsion is thereafter rigidly adhered to. The aura is sometimes bizarre; a severe pain in the foot, a localized cramp, a peculiar sensation, indescribable and unreal in its feeling, may be the first warning of the attack.

In many, perhaps most cases of specific convulsions, instead of a paroxysm of essential epilepsy being closely simulated, the movements are in the onset or, more rarely, throughout the paroxysm, unilateral; indeed, they may be confined to one extremity. This restriction of movement has been held to be almost characteristic of syphilitic epilepsy; but it is not so. Whatever diagnostic significance such restriction of the convulsion has, is simply to indicate that the fit is due to a cortical organic lesion of some kind. Tumors, scleroses, and other organic lesions of the brain cortex, are as prone to cause unilateral or monoplegic epilepsy when they are not specific as when they are due to syphilis.

Sometimes an epilepsy, dependent upon a specific lesion implicating the brain cortex, may be replaced by a spasm which is more or less local and is not attended with any loss of consciousness. Thus, in a case now convalescent in the University Hospital, a man, aged about thirty-five, offered a history of repeated epileptic convulsions; but at the time of his entrance into the hospital, instead of epileptic attacks, there was a painful tic. The spasms, which were clonic, and occurred very many times a day—sometimes every five minutes—were very violent, and mostly confined to the left facial nerve distribution. The trigeminus was never affected, but in the severer paroxysms the left hypoglossal and spinal accessory nerves were profoundly implicated in all of their branches. Once, fatal asphyxia from recurrent laryngeal spasm of the glottis was apparently averted only by the free inhalation of the nitrite of amyl. The sole other symptom was headache, but the specific history was clear, and the effect of anti-syphilitic remedies rapid and pronounced.

Psychical Symptoms.—As already stated, apathy, somnolence, loss of memory, and general mental failure, are the most frequent and characteristic mental symptoms of meningeal syphilis; but, as will be shown in the next chapter, syphilis is able to produce almost any form of insanity, and there-

fore mania, melancholia, erotic mania, delirium of grandeur, etc., etc., may develop along with the ordinary manifestation of cerebral syphilis, or may come on during an attack which has hitherto produced only the usual symptoms. Without attempting any exhaustive citation of cases, the following may be alluded to:—

Dr. A. Erlenmeyer reports (*Die leutischen Psychosen*) a case in which an attack of violent headache and vomiting was followed by paralysis of the right arm and paresis of the left leg, with some mental depression; a little later the patient suddenly became very cheerful, and shortly afterwards manifested very distinctly delirium of grandeur with failure of memory. Dr. Batty Luke reports (*Journ. Ment. Sci.*, Jan. 1874, p. 560) a case in which with aphasia, muscular wasting, strabismus, and various palsies, there were delusions and hallucinations.

In the same journal, April, 1869, Dr. S. D. Williams reports a case in which there were paroxysmal violent attacks of frontal headache. The woman was very dirty in her habits, only ate when fed, and existed in a state of hypochondriacal melancholy.

M. Leiderdorf details a case with headache, partial hemiplegia, great psychical disturbance, irritability, change of character, marked delirium of grandeur, epileptic attacks, and finally dementia, eventually cured with iodide of potassium. (*Medizin. Jahrbücher*, xx, 1864, p. 114. Several cases illustrating different forms of insanity are reported by Dr. N. Manassurow. (*Die Tertiäre Syphilis*, Wein., 1877.)

That the attacks of syphilitic insanity, like the palsies of syphilis, may at times be temporary and fugitive, is shown by a curious case reported by Dr. H. Hayes Newington (*Journ. Ment. Sci.*, London, xix, 555), in which along with headache, failure of memory, and ptosis in a syphilitic person, there was a brief paroxysm of noisy insanity.

DISEASES OF BRAIN SUBSTANCE.—The psychical symptoms which are produced by syphilis are often very pronounced in cases in which the paralysis, headache, epilepsy, and other palpable manifestations, show the presence of gross brain lesions. In the study of syphilitic disease of the brain membranes, sufficient has been said in regard to these psychical disturbances; but the problem which now offers itself for solution is as to the existence or non-existence of syphilitic insanity, *i. e.*, of an insanity produced by specific contagion, without the obvious presence of gummatous disease of the brain membranes. Very few alienists recognize the existence of a distinct affection entitled to be called syphilitic insanity, and there are some who deny that insanity is ever directly caused by syphilis. It is certain that insanity often occurs in the syphilitic, but syphilis is abundantly joined with alcoholism, poverty, mental distress, physical ruin, and various depressing emotions and conditions which are well known to be active exciting causes of mental disorder. It may well be that syphilis is in such way an indirect cause of an insanity, which under the circumstances could not be properly styled syphilitic.

If there be disease of the brain cortex produced directly by syphilis, of course such disease must give rise to mental disorders, and, if the lesion be situated in such a way as to affect the psychic and

avoid the motor regions of the brain, it will produce mental disorder without paralysis, *i. e.*, a true insanity; again, if such brain disease be widespread, involving the whole cortex, it will cause a progressive mental disorder, accompanied by gradual loss of power in all parts of the body and ending in dementia with general paralysis; or, in other words, it will produce an affection more or less closely resembling the so-called General Paralysis of the Insane, or Dementia Paralytica.

As a man having syphilis may have a disease which is not directly due to the syphilis, when a syphilitic person has any disorder there is only one positive way of determining how far said disorder is specific, namely, by studying its amenability to anti-syphilitic treatment. In approaching the question whether a lesion found after death is specific or not, of course such a therapeutic test as that just given is inapplicable. We can only study as to the coexistence of the lesion in consideration with other lesions known to be specific. Such coexistence of course does not absolutely prove the specific nature of a nutritive change, but renders such nature exceedingly probable.

What has just been said foreshadows the method in which the subject in hand is to be here examined, and the present chapter naturally divides itself into two sections: the first considering the coexistence of anatomical alterations occurring in the cerebral substance with syphilitic affections of the brain membranes or blood-vessels, the second being a clinical study of syphilitic insanity.

In looking over literature I have found the following cases in which a cerebral sclerotic affection coincided with a gummatous disease of the membrane. Gross and Lancereaux (*Affect. Nerv. Syphilis*, 1861, p. 245) report a case having a clear syphilitic history, in which the dura mater was adherent to the skull. The pia mater was not adherent. Beneath, upon the vault of the brain, was a gelatinous exudation. The upper cerebral substance was indurated, and pronounced by M. Robin, after microscopic examination, to be sclerosed. At the base of the brain were very atheromatous arteries and spots of marked softening.

Dr. Jos. J. Brown (*Journ. Ment. Sci.*, July, 1875, p. 271) reports a case in which the symptoms were melancholia, excessive irritability, violent outbursts of temper, very positive delusions, disordered gait, ending in dementia. At the autopsy, which was very exhaustive, extensive syphilitic disease of the vessels of the brain and spinal cord was found. The pia mater was not adherent to the brain. The convolutions, particularly of the frontal and parietal lobes, were atrophied with very wide sulci, filled with bloody serum. The neuroglia of these convolutions was much increased, and "appeared to be more molecular than normal, the cells were degenerated and in many places had disappeared, their places being only occupied by some granules." These changes were most marked in the frontal convolutions.

H. Schule reports (*Allgem. Zeitschrift f. Psychiatrie*, xxviii., 1871–2,) a very carefully and meritoriously-studied case. The symptoms during life exactly simulated those of dementia paralytica. The affection commenced with an entire change in the disposition of the patient; from

being taciturn, quiet, and very parsimonious, he became very excited, restless, and desiring continuously to buy in the shops. Then failure of memory, marked sense of well-being, carelessness and indifference for the future, developed consentaneously with failure of the power of walking, trembling of the hands, inequality of the pupils, and hesitating speech. There was next a period of melancholy, which was in time followed by continuous failure of mental and motor powers, and very pronounced delirium of grandeur, ending in complete dementia. Death finally occurred from universal palsy, with progressive increase of the motor symptoms. At the autopsy, characteristic syphilitic lesions were found in the skull, dura mater, larynx, liver, intestines, and testicles. The brain presented the macroscopic and microscopic characters of sclerosis and atrophy; the neuroglia was much increased, full of numerous nuclei, the ganglion cells destroyed. The vessels were very much diseased, some reduced to cords; their walls were greatly thick-

ened, and full of long spindle-shaped cells, sometimes also containing fatty granules.

Dr. C. E. Stedman and Robt. T. Edes report (*Amer. Jour. Med. Sci.*, lxi., 433,) a case in which the symptoms were failure of health, ptosis, trigeminal palsy with pain (anæsthesia dolorosa), finally mental failure with gradual loss of power of motion and sensation. At the autopsy the following conditions were noted: apex of the temporal lobe adherent to dura mater and softened; exuded lymph in neighborhood of optic chiasm; sclerosis of right Gasserian ganglion, as shown in a marked increase of the neuroglia; degeneration of the basal arteries of the brain.

These cases are sufficient to demonstrate that sclerosis of the brain substance not only may co-exist with a brain lesion, which is certainly specific in its character, but may also present the appearance of having developed *pari passu* with that lesion, and from the same cause.

(To be continued.)

EDITORIAL DEPARTMENT.

PERISCOPE.

A Typical Neurotic.

The *Med. Times and Gaz.*, April 5, 1884, says, that in the life of the late Mr. South, which has been recently published by Mr. Murray, there occurs (p. 135) a vivid description from Mr. South's pen of an illness with which he was seized in 1822, being then 25 years of age. He had been working very hard, he tells us, being every day six or seven hours in the dissecting-room, and in the evenings occupying himself with examining his pupils, or sitting up very late at night writing and drinking half a score cups of tea. In the midst of this work he was unexpectedly brought to a stand by illness.

"On the evening of March 21, 1822, I had gone to bed rather earlier than usual, and had been asleep, I presume, about an hour, when I was aroused by seeing over me a gigantic hand and dagger held over my chest. Everything else in the room I saw distinctly, as it really was. * * * As might be supposed, I was horribly terrified, as I was lying on my back and utterly incapable of moving so as to escape the object of my alarm. At last, however, I managed to change my position, the spectre ceased, and, at the same time I threw up a mouthful of the most acid fluid, which I can only compare to vitriol. I was very much agitated for some time. * * * Next morning I was very ill; had a cobwebby sensation over the left side of my face, and a most curious feeling about the hinder upper part of the left parietal bone, as if my brain were being continually scratched with finger nails, in a space about as big as a crown piece. I do not recollect whether I had any headache, or what the state of my pulse was, but Dr. Cholmeley, who soon came to me, ordered me to be cupped on the scalp and blistered,

and I think I was also cupped in the nape two or three times in the course of a few days and blistered, besides taking calomel and antimony, but not to produce ptyalism. In the course of the week the scratching sensation was relieved, but did not subside. I was soon after attacked with numbness, first of one leg and foot, and then of the other, so that I seemed at these times to be walking with my foot in a pillow. My hands would also become alternately numb in like manner, and in the space between the right thumb and forefinger I had the sensation of a very hot iron resting on it, which sometimes was positively painful. Excepting the scratching in my brain, which continued for some weeks incessant and more or less severe, and the cobwebby feeling, which was not constant, but always restricted to the left side of my face, the numbness in my feet and hands alternated in a very strange manner. Sometimes my foot on one side alone was numb, sometimes the hand on the same side would be numb at the same time, or would be numb alone; at other times my right hand and my left foot would become numb, and then, again, the left hand and the right foot; and these sensations would last a day or two, but without any regularity. But the most persistent was the burning sensation, which was always confined to the right hand. These sensations, at very uncertain periods, continued with me for many years, and were always attendant on any digestive derangement. There was, however, only this exception, that the scratching subsided entirely after two or three years. The severity of this first attack began to diminish about three weeks or a month from its onset, and at the end of six weeks it was thought advisable I should go into the country, and the day was fixed, but on the previous evening, as I was quietly lying reading on the sofa, I was suddenly seized with violent palpitation of my heart,

which being the first time I had felt it, terrified me so much, and was so distressing, that I thought I was about to die immediately. The choking sensation and the violent irregularity of my heart, as if it were being wrung out of place, was most terrific, though I had often witnessed the same condition in my dear father, who for years had been subject to palpitation, always accompanied by severe and continued eructation for two, three, or more hours. After an hour or two the severity of the attack subsided, but my pulse was very irregular, and for two or three days the least exertion, such as merely walking across the room, brought on the palpitation, and for some time I was obliged to lay hold of chairs or anything else at hand, as I had a terrible dread of falling to the ground. [After this Mr. South went to stay in the country, and his health slowly improved.] The palpitations did not cease, although they became less severe. But in reference to them was a circumstance which I could not explain. Whilst I was on horseback and trotting about, I had not any palpitation, and felt tolerably well, but directly I put my foot to the ground the palpitation recurred.²²

Extra-Uterine Gestation.

Dr. W. A. Michie reports this very interesting case in the *Brit. Med. Jour.*, April 12, 1884:

On January 24, 1882, J. C. came under observation, suffering from ulceration of the os uteri, and hypertrophied cervix uteri, with debility, caused by a long-continued leucorrhœal discharge. Eight days later, caustic potash (solid) was applied freely to the os, followed by vaginal injection of dilute acetic acid. Two days subsequently, having been out of bed and been exposed to cold, she suffered from sudden and severe pain in the hypogastrium, which culminated in an acute attack of metritis. The temperature rose to 104°; and the uterus, enlarged and tender, extended upwards to the umbilicus. The acute symptoms subsided in about five days, and, at the end of three weeks, the uterus had regained its normal size. Soon afterwards, she thought herself pregnant, the last menstrual period having been in January. She continued in that belief until August 31, when I had an opportunity of seeing her in bed, from sickness and vomiting. Examination of the mammae and abdomen then revealed signs of an ordinary pregnancy, apparently near the end of the seventh month. Two months later, I again saw her, she having called at my house. I made no examination, but she seemed in most perfect health, and to all appearance a woman near her confinement. I lost sight of her for about five months, until March 21, 1883, when I was called, as she had slight bronchitis and nervous debility. She gave the following account of her case, in the interval, from the end of October, 1882, to March 21, 1883:

Towards what she thought the end of the ninth month of pregnancy, she had frequently recurring pains, as if those of labor, extending over two or three weeks. There were no foetal movements after the eighth, or first week of the ninth, month. In the tenth (and perhaps the eleventh) month, she enjoyed fair health. She entered the Edinburgh Infirmary under Dr. Simpson, about

January 1, 1883, and remained under his care for six weeks; having been told that she suffered from a tumor in the abdomen, for which nothing, under present circumstances at least, could be done, she returned home, and took to bed. She stated that she had menstruated at least twice since she left home until now, and, about the time she left the infirmary, she perceived a slight diminution in the size of the abdominal swelling, and it had continued to diminish until now. Latterly, there had been constant diarrhœa, with paroxysmal and recurring pains in the right side of the abdomen.

I discovered a large movable tumor lying on the right side of the abdomen, extending from the umbilicus into the pelvis, where it could be felt high up through the roof of the vagina, posterior to the uterus, and pressing towards the rectum. The tumor, which was elongated and indurated, was somewhat uniform and smooth on the surface, and painful to pressure in the right iliac region. There had been no bladder symptoms, nor did vaginal examination reveal any uterine displacement, or apparent enlargement. The mass pressing more towards the rectum set up tenesmus, and apparently kept up a catarrh of the bowel. During the next two months, from March 21 to May 17, I saw her on two or three occasions; and at each visit the pain in the abdomen, hectic, tenesmus, and diarrhœa were more marked, while the tumor was sinking more into the pelvis. On May 17, I was called to her. She said there had been constant pain in the rectum for some days with incessant desire to go to stool, and that the pain that day had been excessive and was still increasing. Examination showed the rectum to be blocked with a foetal skeleton, enveloped in a tough fibrous band ruptured at the lower end. After more than an hour's work, the patient being under chloroform, nearly the whole of the skeleton of almost a full-grown foetus was removed from the rectum. One frontal and one parietal bone were removed subsequently. The woman made a perfect recovery, and was out of bed in two weeks.

Perforating Ulcer of the Foot in a Child.

Mr. Edmund Owen reports this interesting case in the *Lancet*, April 5, 1884:

Ellen L—, a girl aged eleven years, was admitted to the Louise ward on December 27 last, for an ulcer which extended deeply into the sole of the left foot at the level of the heads of the metatarsal bones. The sore was almost as wide as the foot, and nearly as long in the antero-posterior measurement as it was from side to side; the adjoining skin was thickly crusted with horny, discolored scabs of epidermis. The foot was stunted, and the toes had been evidently much affected by the long-standing disease, the first appearance of which dated from the time when she was sixteen months old. Small pieces of bone had at various times come away spontaneously from the toes through the ulcer; there was, at the time of her admission, no trace of the little toe, the fourth toe was represented by a small nodule, and the third by a rather larger nodule; the great toe was the only one that possessed a nail. The foot was very warm, and was

covered by beads of perspiration; its dorsal surface was highly pigmented, and possessed a considerable growth of long hairs. There was no marked anæsthesia in the foot, but at the knee of the affected side there was complete absence of tendon-reflex. On the right side also the knee-jerk was considerably diminished. The child had never suffered much pain from the ulceration; there was some glandular enlargement in the groin. There had been no ataxy, crises, or pains; the sore had never been healed from the time of its first appearance. In various parts of the body were extensive patches of pigmentation, the contrast being heightened by the presence of leucoderma in their midst. The pigmentation was noticed at birth; the family history was good. In the course of the previous year the child had been an inmate of the hospital under the care of Mr. Thomas Smith, and from the careful notes which were then taken by Dr. Angel Money, and from those since added by the present registrar, Dr. Chafey, this short report has been compiled. Under the treatment of absolute rest in bed for over two months the ulcer completely healed, though a dusky patch of congested skin has recently appeared upon the dorsum of the foot, which looks suspiciously like the forerunner of another attack of ulceration.

Remarks by Mr. Owen.—During the last few years many cases of perforating ulcer of the foot have been reported in England, almost all of the subjects of them having been adult males. In the adult female but very few cases have been observed, and a report of the condition being found in childhood is of great interest. In general appearance and characteristics this ulcer closely resembled the condition as observed in the adult, and its report is interesting in that it strongly opposes the theory that the *mal perforant* is the result of local pressure. In the adult the ulceration frequently begins beneath or against a part of the foot which is hard and tender from corns. The ulcer in this child was evidently secondary to degeneration of nerve-tissue, and from the absence or impairment of the patellar-reflex on the two sides, the seat of the degeneration must be looked for in the spinal cord.

The Anatomy of the Hymen.

Dr. S. Pozzi has been making some investigations on this subject, which he thus formulates in the *Gaz. Med. de Paris*, February 23, 1884:

1. The hymen is an appendage of the vulva, and not of the vagina; it is formed at the expense of the uro-genital sinus, which also forms a short vestibular canal, this last being the entrance to the vaginal canal.

2. The name *bulb of the vagina* has been unwisely given to the lower part of the vascular plexus, which occupies a prominent position in that canal. There is no ground for distinguishing a distinct organ here, and it should not be compared to the bulb of the urethra in man. It may as well be said that the corpora spongiosa are the analogues of the labia minora.

3. An attentive examination of the vestibular region in woman will show a small band or frænum (*bride*) between the clitoris and the meatus, about two-tenths of an inch long in the adult,

easily recognized by the rectilinear outline of its borders, marked by a median furrow, and divided inferiorly so as to encircle the meatus. When the hymen exists, it appears to be continuous with this frænum. Pozzi proposes to call this small band, now described for the first time, the male frænum of the vestibule (*bride masculine du vestibule*).

4. The study of the balano-urethral frænum—so noticeable in cases of hypospadias—shows the identical connections between that large band and the atrophied frænum (*bride*) of the female.

The bifid condition at the meatus and its continuity with the hymen are easily shown. But in hypospadias it is clear that the frænum is a vestige of the corpus spongiosum arrested in the embryonic stage. The hymen of the hypospadias then, proceeding from the frænum, is an appendage of the corpus spongiosum, and is the terminal part or bulb. This conclusion may be applied to the female organ, and it may be said that *the hymen in the female is the analogue of the bulb of the urethra in man; it is the bulb arrested in the fetal state, non-erectile, and membraniform*. [Henle has noted the frequent presence of cavernous or erectile tissue in the hymen.]

5. The connections of the gland of Bartholin to those of Cowper may be also easily made out. The considerable length of the excretory canal for the male glands, compared with their shortness in the female, should be especially considered. This admits of the opening of the canal considerably in front of the membranous region, at a certain distance in front of the posterior part of the bulb; that is to say, at a point exactly corresponding to the opening of the duct of Bartholin, in front of the hymen, at a certain distance from the fourchette. The opening of Bartholin's gland in the pre-hymeneal portion of the vulva is the origin of that singular lengthening of Cowper's duct.

6. The male frænum of the vestibule in woman is the vestige of the anterior or cylindroid portion of the corpora spongiosa, just as the hymen is the vestige of their posterior or ovoid portion.

Inoculation of Intermittents.

Dr. C. Gerhardt (*Zeitsch. f. Klin. Med.*, vii. 4.) instituted in two individuals the following experiments: He abstracted blood from a patient, while the latter was suffering from a seizure of intermittent fever, and inoculated with this blood two healthy persons. He observed the following precautions:

1. The locality in which the experiment is to be made must be totally free from malaria.

2. The persons whose blood was employed for this purpose must not suffer from syphilis or any other inoculable disease.

3. The persons to be inoculated must agree to the experiment, and voluntarily subject themselves to it.

4. The temperature record of the individuals to be experimented upon must have been carefully kept for some time preceding the experiment, and evince not the least increase of temperature. They must have been at the time of the operation, and for a long time preceding the same, utterly free from all febrile symptoms.

The experiments themselves gave the following result:

1. The intermittent fever, caused in this manner by inoculation, is distinguished from the natural malarial fever by greater irregularity of the attacks of the former.

2. After a number of single or group-wise attacks, a regular quotidian analogous to the form present in the original source, developed itself in the one person on the twelfth day, in the other on the twenty-fifth.

3. The fever, thus artificially produced, reached in both cases such a high degree (temperature as high as 41.1°C ., and deviation of fever fully twenty-four hours), that the experiment had to be interrupted by the administration of quinine.

4. There is no doubt, that the pathogenic element of malaria is present in the blood of a patient suffering from intermittent fever, at the time of a seizure, and that it is then, together with the blood, inoculable.

5. With very few exceptions, all the seizures, by which the inoculated persons were attacked, set in at the hour at which the inoculation had been made, or if they had not done so (as was a few times the case), they reached their acme at that time. The period of incubation was difficult to determine; the first febrile movement made its appearance in the one case on the seventh, in the other on the twelfth day, and the graver series of seizures began in the one on the seventeenth, in the other on the twenty-fifth day.

This agrees with what has been usually taught to be the period of incubation—from seven to twenty-one days.

The Fever of Growth.

The *Med. Record*, April 5, 1884, quoting from *Centrab. für Chir.*, January 26, 1884, says:

This affection, first described by Bonilly, in 1880, is characterized by a fever pursuing a specific course, and accompanied by pain and tenderness in the epiphyses of nearly all the long bones, and is followed by a period of very rapid growth of the individual. It may occur at any time between the fifth and twenty-first year. It is occasioned by excessive exercise, as long walks, standing for a considerable time, fatiguing gymnastic exercises, swimming, etc. Bonilly distinguishes three forms of the disease:

1. Acute, with rapid course, the most common.
2. Acute, but more protracted than the first.
3. Chronic or relapsing (*trainante*).

Fever or tenderness of the bones are common to all these forms. The pain occupies the "juxta-epiphysal" zone, and is most commonly located in the lower ends of the femora, though all the long bones are not infrequently affected. The joints are not involved, as a rule, though sometimes serous effusions, more especially in the knees, are met with. The more rapid form runs its course in from twenty four to thirty-six hours. The second variety may be of several days' duration, and may even be accompanied by typhoid symptoms, but its termination is always by a rapid return of temperature to the normal. The chronic form is characterized by a succession of attacks running along for weeks and months. The prognosis is favorable, though relapses are common. Quinine should be given during the attacks, and in the intervals all fatiguing bodily

exercises should be avoided, while attention is directed to a building-up of the general condition. The following case of growing fever is reported by Dr. Guillier: A child, eleven years old, of rather delicate constitution, was taken suddenly ill with convulsions, high fever, and pain in all the extremities. There was tenderness over the epiphyses of the femur, tibia, and humerus on either side. A slight improvement on the next day was followed by an increase in all the symptoms in the evening. Under antipyretic treatment the fever subsided on the third day. After five weeks the child was able to leave the bed, though she was still very weak. During that time the height increased two and one-half inches.

The Relationship of Malignant Disease to the Food and its Treatment by Diet.

The *Med. Times* says that in a communication to the Académie de Médecine de Bruxelles, M. Van den Corput made a suggestive reference to the etiology of cancer (*Revue de Thérapeutique Med. Chir.*, January 15). Upon considering the geographical distribution of cancer the author found that it was almost unknown in hot countries, and also among certain religious communities in other latitudes which abstain from the use of meat. The only apparent connection between these two classes is the diet. It is apparently, therefore, to an exaggerated animal diet—which at the same time causes an excess of chloride of sodium in the system—that we must look for the principal pathogenic cause in the cancerous diathesis. This must reside in an infection of the organism, either by certain nitrogenized products susceptible of disturbing or changing the normal nutrition processes, or by certain inorganic elements, such as the phosphates, capable of favoring the histogenesis of neoplasms. A confirmation of this view was found in the rapid emaciation of the patients, accompanied by the decreased discharge of urates in the urine. The application of these views to the treatment of cancer is obvious, but it does not appear that the author has succeeded as yet in demonstrating the correctness of his views by clinical investigation.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—Those of our readers who would like to pursue the vivisection question lately aired in our pages, can obtain from the "Woman's Branch" of the Pennsylvania Society for the Prevention of Cruelty to Animals a pamphlet of eight pages in which the ladies offer a reply to the letters of Drs. Mitchell and Wood, which we published. As the matter seems to rest on a question of memory of the gentlemen concerned, we ourselves refrain from expressing an opinion.

—In a reprint from the Indiana State Board of Health, Dr. H. V. Sweringen gives a brief

statement of the importance of ventilation, food, sleep, building, etc., to public health.

—Dr. A. Jacoby, of New York, has a very erudite article on congenital lipoma published as a reprint. He has seen and describes several remarkable cases of this disease, and enters fully into the literature of the subject.

—A noteworthy article is before us by Dr. Chas. S. Turnbull, of Philadelphia, in which he calls attention to the great value of boro-glyceride in the treatment of contagious ophthalmia. This new agent promises to take a leading position in the therapeutics of diseases of the eyes. He uses a fifty per cent. solution. It is especially valuable in the case of young children.

—The report of the Pennsylvania Hospital for the Insane for 1883 contains a full memorial of the late Dr. Thomas S. Kirkbride, who for so many years was physician and superintendent. His name was associated for nearly half a century with the progress of diseases of the mind in this country.

—The Address of the President of the N. Y. Neurological Society, Dr. W. J. Morton, was upon "Neurological Specialism." He strongly advocates the increase of specialists in medicine.

BOOK NOTICES.

Shakespeare as a Physician. By J. Portman Chesney, M. D. 8vo., pp. 226. Illustrated. J. H. Chambers & Co., St. Louis.

The title page of this volume informs us that it "comprises every word which in any way relates to medicine, surgery, or obstetrics, found in the complete works of that writer (Shakespeare), with criticisms and comparisons of the same with the medical thoughts of to-day." These extracts are arranged under the various headings, Obstetrics, Psychology, Neurology, Pharmacology, Etiology, Dermatology, Organology, Chirurgery, and Miscellaneous. It will be seen that out of this net, no medical passage is likely to escape.

The author is evidently a curious reader and a careful student of the great dramatist; and the most versed Shakespearian will find new things in his pages, salt in his remarks, and cunning in his comments.

There are some points about his work which to us mar the pleasure in its perusal. One is the sensational and often slangy headings to his chapters; another, that the type does not distinguish between the extracts and the comments; that too little attention is given to various headings; and that the pictures are badly printed. In the next

edition we hope he will reform these errors, either indifferently or altogether, and thus render his volume more attractive.

Conversations on the Subject of Medical Ethics, with an Account of the Medical Empiricisms of Europe and America. By Frank H. Hamilton, M. D. Small 8vo., pp. 129. Bermingham & Co., New York city.

The much-discussed matter of "Old Code and New Code" is here taken up in an imaginary conversation between two physicians of diverse opinion, and each represents the merits of his own view. Neither is satisfied with matters as they stand, though the one is for more sweeping reforms than the other. Considerable side talk is held of the various 'isms and 'pathies which from time to time have arisen. We observe that the author falls into the common error of supposing that the "eclectic" schools derive their name from claiming to select the best out of all schools; the real origin was that they claimed that medicines have an eclectic effect on certain organs and tissues.

Drugs and Medecines of North America, Vol. I., No. 1.

This very attractive quarterly, of which we have the first number, is under direction of J. N. and C. G. Lloyd, of Cincinnati. It appears that the design is to carry it through the flora of North America in regular order. If this work is to be continued throughout on the same scale as that of the first number, the editors have a great task ahead of them—one in which, however, they must have the good wishes of botanists, pharmacists, and physicians. This number offers 32 pp., 4 full-page plates, and 9 figures. All the illustrations are good and characteristic. The one by Mrs. Stowell is not only artistic, but perfect in anatomical detail.

Plate One, Clematis Virginiana, is absolutely life-like. The order of Ranunculaceæ is only partly finished in the part before us. The type is good, and so far as we may judge hastily of a text involving so much labor, it is exact, and conscientiously done. It is not often that a book gives promise of so much, and then realizes to the last all the good we anticipated from the earlier numbers. We hope this may be an exception to the rule.

Having been thus explicit in regard to the merits, we are bound to be equally frank and say that the alleged or supposed provings given on pp. 15, 24 and 32, can have no value outside of the school in which infinitesimal doses and enormous credulity go together.

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 PHILADELPHIA, PA.

WHEN IS A FŒTUS A HUMAN BEING?

Recently in Berlin a very interesting case was tried in the criminal court. K—, a barber, not privileged to perform midwifery, was sent for by a woman in labor. He at once applied the forceps, and in such a butcher-like manner, that he broke the bones of the skull and killed the child. Medical testimony proved that the case was a normal delivery, that there was no indication whatever for the application of the forceps, and that the child would have been born alive had it not been thus roughly treated. Certainly, the quack was convicted. The law in Prussia says, that manslaughter is the careless killing of a human being (eines menschen). The question to be decided, and in such a case having been never previously determined, was: When does a fœtus become legally a human being (ein mensch)? The case was carried before the highest tribunal, and this has decided that a fœtus becomes legally a human being the moment labor has begun. The defense had contended, that as no part of the fœtus had as yet left the mother, and as only one part of it had left the uterus, it still was a fœtus. But the Court remarked, that it would be wrong to consider a fœtus in one act of the delivery a human being, and in another act a fœtus; that its existence as a human being in the sense of the law began at the time when it commenced to break its connection with the mother, when it made its first effort for a separate existence.

While it may, perhaps, be more scientific to consider a fœtus a human being at the moment of its first breath, for the purpose of punishing such an outrageous quackery as that evinced in the foregoing case, the decision, probably, is a wise one. Besides, were the act of breathing alone to decide the question, many cases with technical difficulties might arise, as, for instance, those where, as in cases of breech presentation, or in turning, the feet are first born, and with the interruption of the circulation the fœtus, while still within the body of the mother, makes an effort at breathing, and similar cases. Further, the plainer, the less dubious such a decision, the better for the protection of human society. If it is

once determined that a *fœtus* is a human being from the first beginning of the labor, *i. e.*, at full maturity—there is no room left for doubt, and no opportunity given to a shrewd criminal lawyer to free his client from punishment by mere technical points of law: and this is the reason why we call the decision a wise one.

INFECTIOUS ORCHITIS.

Occasionally cases of orchitis are met with where the individual affected tells us that he has no idea whatever how he contracted the disease. We have more than once known physicians to shrug the shoulders, and insist that the patient, were he to tell the truth, would very well be able to give the cause—gonorrhœa—of his epididymitis. Others again, coming nearer the real pathogenic element, expressed it as their opinion that exposure to cold in persons with rheumatic tendencies, or in such as were formerly suffering from orchitis, was an occasional causing element.

It has now been determined that there exists an epidemic, infectious form of orchitis, which is usually met with in a locality at one and the same time with epidemic parotitis (or mumps) and with epidemic nephritis. In a late meeting of the Berlin Medical Society (February 11, 1884, reported in *Deutsch. Med. Zeitg.*, 1884, No. 16), a debate took place on this subject. Occasionally the disease would begin, said Mr. Croner, with parotitis, and a few days later nephritis develops itself on one testicle, or in females, one labium majus becomes the seat of the affection, while in again others, the inflammation of the testicle alone constituted the disease. Such cases also happen sporadically.

It is, therefore, probable that when a person, otherwise healthy, is suddenly attacked by acute inflammation of the testicle, and especially, when cases of parotitis happen in the same neighborhood, we can take it for granted that he is suffering from the infectious form of the malady; and the same holds good of those peculiar and sudden abscess formations in the large labia of women, an occurrence which heretofore, at least as regards its etiological points, has but too often baffled

the skill of the expert. And in all such cases it may be well to look after the general condition, and especially after the kidneys of the patient; and we ourselves were more than once astonished at the violent general affection in such cases, and at the dropsical symptoms at times appearing. In all, especially infectious diseases of the glandular system, the kidneys seem very prone to participate, as they besides also have a tendency of doing in all febrile infectious maladies, as small-pox, scarlatina, puerperal fever, and even, after Henoch, in varicella. The fact teaches us to use in these cases, with reference to the kidneys, the same foresight and precautions as are generally employed in scarlet fever.

ON TREATMENT BY THEORIES.

It has been several centuries since Bacon wrote his *Novum Organum*, in which he set forth the correct principles of scientific philosophy. They have guided the development of modern thought. In medicine, however, they have had but tardy admission. Even to this day too many of our procedures are controlled by preconceived theories, rather than by the result of observation.

Not only does this apply to those forms of practice which are not recognized as scientific, but also in many departments of our own school. This has lately been very noticeable in methods of treatment based on the theory of germs. It is painful reading to peruse the reports from the Berlin hospitals of the anti-parasitic treatment of phthisis. The patients were selected from a class stated to hold out a fair prospect of recovery. Under the steady administration of nauseating drugs, of irritating inhalations and other germicides, the majority of them died in five weeks, and those who survived longer seemed to owe it to their opposition to a continuance of the treatment.

Inasmuch as the latest researches have thrown great doubt on the alleged discoveries of Dr. Koch, at least so far as they make out the bacillus to be a cause of tuberculosis, the folly of such attempts is only too manifest.

With the constant endeavor of scientists to seek

notoriety by the premature statement of theories of disease, it becomes the part of every prudent practitioner to stick to the old lines of therapeutics, rather than to jeopardize the chances of his patients by running after new things.

We blame the homœopath for his servility to his exclusive dogma; we denounce the eclectic for his vague hypothesis of dynamics; but we are equally to blame when we adopt and carry into practice every new-fledged theory of histologists.

The instance we have given from the treatment of consumption could be easily paralleled from other diseases. Diphtheria, typhoid fever, and cholera, offer numberless examples of wild medication based on unripe observation. The principle we should ever observe is to hasten slowly in any departure from plans of treatment which relieve symptoms and increase the comfort of the sick. Specifics are scarce: many say it is unphilosophical to look for them—at any rate, they are to be sought not through *a priori* theories of disease, but from the results of clinical observation.

SUDDEN DEATH AFTER MORPHIA.

It has now been often observed, that in those cases of organic diseases of the heart in which, due to degeneration of its muscular fibres, the organ is very weak, hypodermic injections of morphia suddenly cause the death of the patient. It is the more necessary to draw the attention of practicing physicians to this fact, as the often very severe attacks of pain, and the seizures of dyspnœa, so characteristic of these heart-lesions in their later stages, are so promptly relieved by the hypodermic medication. In *Fortsch. der Med.*, 33, 1883, Dr. Runeberg's case, reported in the *Centrbl. f. Nervenheilk*, 13, '83, is mentioned, and a number of similar cases added. R.'s case was as follows:

In an army officer, æt. 40, strong and vigorous, and suffering from severe attacks of angina pectoris, R. made a morphia injection of one-quarter of a grain. About two minutes later, patient suddenly gave a start, opened widely his eyes, whose pupils became dilated to their utmost, and—was dead. The autopsy evinced extensive

sclerosis of the coronary arteries. The muscular tissue was degenerated. Neither potatorium nor liver were etiological moments. Though R. believes that the lesion was such as to have caused death at any moment, the subcutaneous injection of morphia evidently accelerated the exitus in R.'s opinion.

Dr. Unverricht, in Breslau, adds to this, that his own experience had taught him caution with the hypodermic injection of morphia in all cases of organic heart-disease, if accompanied by weakness of the muscle; and in conclusion, he mentions Israel's case, where death set in after the injection of one-sixth of a grain of the same drug. The disease here was mitral insufficiency, with grave morbus Brightii, the compensation having ceased. We can contribute one case of our own, where, in a case of fatty degeneration of the heart, the injection of one-sixth of a grain was immediately followed by instantaneous death.

"WOMEN ARE DIRTY CREATURES, ANYHOW!"

This not very complimentary remark was dryly made by a physician of considerable experience among women, during a discussion of Dr. White's remarks before our County Society, which we have noted in our editorial on gonorrhœa. At first we were staggered by the ungallantry of the remark, and wondered at it. A few words more, and we not only realized the full force and meaning of the remark, but felt that it was so eminently true that a few words of advice on the subject would be most opportune.

The remark was meant for the *vagina*, and our friend went on to ask how many women ever syringe out the vagina, unless ordered to do so by a physician, and yet how few women are there who have not some kind of a vaginal or uterine discharge? The old university resurrectionist, Nash, used to say (more forcibly than elegantly) that every man with an elongated prepuce had a cheese-factory at the head of his penis; by which he meant to convey the idea of the accumulation of smegma which occurred in those so formed,

unless they were very particular about washing the glans. So our friend referred to the accumulation and decomposition of the various discharges in the vagina, which must necessarily result in making this cavity a very foul place indeed.

The practical advice suggested by this remark is that all women should provide themselves with a good suction syringe, and at every bath, when the surface of the body is washed, the cavity of the vagina should be well syringed with soap and water.

Extended comment is unnecessary; these few words will suggest to every physician the propriety of such a procedure, and will, no doubt, cause him to give such good advice to all his female patients.

NOTES AND COMMENTS.

Cure of Alcoholic Tremor by Veratria.

The view has been often pronounced that the tremor, as met with in potatoes, in cases of central degeneration, in fevers, etc., really is a muscular contraction, in which the number of oscillations in a unit of time is not sufficient to cause tetanus, and that this may happen as well in consequence of want of innervation as of muscular degeneration. Acting upon this premise, and upon the fact that after small doses of veratria the muscle reacts on every stimulus by contractions more energetic and more continuous than is normally the case, Dr. Basile Feris (Report of Société de Biol. de Paris, Nov. 26, 1883, *Allg. Med. Central Zeit.*, 2, 1884), thought of making use of this drug in the tremor referred to. He administered to such patients daily four pills, each containing the one hundred-twentieth ($\frac{1}{200}$) of a grain, at intervals of one hour each. His 13 patients (10 potatoes, 2 with multiple sclerosis, and 1 tremor after typhoid fever) were perfectly and totally cured of their tremor within a period of from five to fifteen days! Testing them by writing (perhaps the most reliable method to show an improvement in a person suffering from tremor), they all denoted a visible improvement on the very first day, as the tests one hour before and one hour after the first pill clearly demonstrated. F. advises, however, for the sake of precaution, no matter how well established apparently the cure, to continue the treatment for about ten days longer, to prevent relapses from happening. F.

had opportunity to convince himself that in all his cases the improvement had still continued after the lapse of four months.

If this remarkable cure had not been reported by a Frenchman, we would say that an important and highly valuable discovery had been made. But we have been so often disappointed with cures reported to have taken place in France, and which nowhere else would succeed with the same treatment, that we will wait until we hear from other sources the effect of the remedy. It is well known that in all cases of tremor, especially, however, in disseminated sclerosis (and also in drunkards after a glass or two of whisky), a sudden improvement is very apt to take place, no matter what the treatment at the time. In the *Specialist*, Prof. H. Engel published a lecture of his, in which he reported several such cases—amongst others, that of Professor H. R——, who had been suffering from one of the most pronounced forms of multiple sclerosis. Dr. Engel recommended manipulation; the second day, most of the tremor had disappeared. But should a further trial prove the correctness of Feris's observations, the discovery would be a really valuable one.

Phosphide of Zinc.

The *New York Med. Jour.*, April 5, 1884, tells us that in a recent number of the "Gazette hebdomadaire de médecine et de chirurgie," M. Paul Vigier remarks that, although phosphide of zinc contains twenty-five per cent. of phosphorus, it requires to be given in doses eight times as large as those of phosphorus, for in the system its phosphorus enters into combination with hydrogen, and in that state has only half the activity of phosphorus. Leaving the question of dose out of account, however, much of the disappointment that has been met with in the use of the drug is no doubt to be ascribed to an imperfect salt having been used. In the process of making phosphide of zinc, the salt forms in two different states, one part of it subliming, and the other forming a gray, friable mass. The latter form predominates in the process of manufacture, but is very variable in its percentage of phosphorus. An eighty-per cent. phosphide answers every purpose, but all below sixty per cent. should be rejected. The following convenient method of assay is given: 0.586 gramme of the phosphide, wrapped in a piece of cigarette paper, is introduced into a graduated gasometer, inverted over mercury, and containing 8 ccm. of hydrochloric acid. If the phosphide is pure, it ought to disengage 100 ccm.

of phosphoretted hydrogen completely absorbable by a concentrated solution of sulphate of copper; an eighty per cent. phosphide will disengage 80 ccm. of the gas, and so on.

A New Remedy for Scarlatina-Dropsy.

Dr. P. Heuser writes to the *Deutsche Medicinal Zeitung*, 16, 1882, that he has nearly always achieved a rapid cure in scarlatina-dropsy, and even when internal remedies could be no longer administered, by the following method:

He daily rubs into the skin in the region of the kidneys a mixture of one part of croton oil, with two parts of ol. papaveris. Mostly one such injection suffices to cause within a few hours the appearance of a severe eruption of the skin, and simultaneously a great improvement in the condition of the patient, and amelioration of all the dangerous symptoms. The change for the better at once sets in with the commencement of the artificial exanthem. If the symptoms again become aggravated, the procedure is repeated. Internally H. administers spirit. mindereri in small doses.

During the time we were in Berlin a quack had probably saved the life of a child suffering from uræmia after scarlatina latens, by employing Baunscheidtismus over the region of the kidneys. This, as is well known, consists of an instrument which is applied to the skin, when by a snapper-like arrangement (as in wet cups the knives), 30 to 50 fine needles are suddenly let fly into the skin. These needles had previously been dipped into diluted croton oil. An eruption followed, and diuresis was re-established.

Localization of Tactile Sensations.

The investigations which have for their object the localization of the cerebral functions, still continue. The motor-sphere is no longer disputed by anybody. Some, as Munk, contend that the sensation of touch also has its centre in the ascending parietal convolutions—the seat of motion, *i. e.*, its will-centre. Recently, Dr. Bechterew, in Petersburg (*Neurol. Centrblt.*, 18, 1883,) has again taken up this subject, and thus far comes to the following conclusions:

After removal of the so-called motor-sphere in animals, they evince no impairment of any of the following sensations: That of touch, of position (tactile-sense, locality-sense), general sensation, and perception. They have lost only the voluntary motion in the affected extremity. For the perception of tactile impressions, for the muscular

sense, and for painful sensations, special centres exist, which are situated near the motor-sphere. The centres for tactile sensations lie immediately posteriorly and externally to the motor-field, while the centres for the muscular sense, and those for painful sensations, occupy the region immediately above the beginning of the fossa Sylvii. The two last-named centres do not lie one above each other, but the one bordering the other; for in cases of limited lesions of this cortical zone, either a disturbance of the muscular sense of the contralateral extremities, or only that of painful impressions is noted.

Bichloride of Mercury in Diphtheria and Croup.

Dr. William M. Thallon contributes two articles on this subject to the *N. Y. Med. Jour.*, April 12 and 19, 1884. Dr. Pepper, of this city, is a great advocate of this treatment. He uses it in large doses, with the following rules to guide him: If the false membrane is increasing, he increases the drug; if it is stationary, he maintains the same dose; if it is decreasing, he diminishes the remedy; and if the membrane has disappeared, he at once stops the bichloride.

He has found it convenient to have two standard formulas, according as he wishes to combine iron with the mercury or not. He generally writes for a three-ounce mixture, with half a grain of the bichloride, so that each teaspoonful contains about one-fortieth of a grain. The following are his prescription models:

FORMULA I.

- | | | |
|----|-------------------------------------|--------------------|
| R. | Hydrargyr. bichlor., | gr. ss. |
| | Tinct. ferri chlor., | f. ʒ iij. |
| | Glycerin., | f. ʒ ss. |
| | Aquæ, | q. s. ad f. ʒ iij. |
| M. | Sig. f. ʒ j. as directed, in water. | |

FORMULA II.

- | | | |
|----|-------------------------------------|-----------|
| R. | Hydrargyr. bichlor., | gr. ss. |
| | Vin. pepsin., | |
| | Elixir bismuthi, | āā ʒ iss. |
| M. | Sig. f. ʒ j. as directed, in water. | |

The second formula is the pleasantest way of prescribing the remedy, and it is the one used by Dr. Pepper.

Practically, he now generally begins with the second formula, and, when convalescence has commenced, resorts to No. 1 to get the benefit of the iron.

He does not attempt to explain the action of the bichloride; but bases his claim that it will give better results than other treatment known at present, entirely on clinical evidence. An important point is that the drug should be well diluted, whereby its irritating properties are avoided.

Statistics of Diphtheria.

The *Med. Times and Gaz.*, March 15, 1884, tells us that M. Florand supplies to the *Revue Mensuelle des Maladies de l'Enfance* some interesting statistics relating to the cases of diphtheria, admitted to the Hôpital Trousseau, in Paris, during 1883. There were 606 cases of diphtheria admitted, of which 165 were pharyngeal, while 441 affected the larynx, or air-passages. Amongst the 165 cases of pharyngeal diphtheria, there were 65 deaths, making a mortality of nearly 40 per cent. The 65 deaths included ten from paralysis, the rest dying from the toxic effects of the disease, or of measles, or scarlet fever. Of the 441 diphtheritic croups, 359 were operated upon with 244 deaths, a mortality of 68 per cent. The 359 cases operated upon included 40 cases of croup complicating measles, and 30 who were under two years of age; and among those who recovered after tracheotomy, there was an infant of thirteen months, three under twenty months, and two which were complicated with measles. The cases which were not operated upon were for the most part those cases in which there was wide-spread diphtheria of both pharynx and larynx, and which were moribund when admitted. These results are said to be the most satisfactory which have been obtained for many years at the Hôpital Trousseau. It is interesting to note that several cases of paralysis occurred after laryngeal diphtheria, thus pointing strongly to the identity of pharyngeal diphtheria and "membranous croup."

New Method to Determine the Percentage of Cream in the Milk.

The present method is a very troublesome one, and occupies considerable time. In the last meeting of the Society for Natural Philosophy in Frankfort-am-Main, Dr. Lepsius described Foxhlet's new method, which is as follows: A potash solution is added to the milk, and the latter then shaken with ether. With fine aerometers the percentage of fat can be then easily determined in the ether. It is said, that while this method permits the same accuracy as the old one, it has the great advantage of great rapidity. In the same meeting the subject of the value of skimmed milk as a nutritive substance was also debated. It was generally admitted, that on account of its cheap price and percentage of albuminous material—this not being at all diminished by the removal of the cream—skimmed milk is of great value, especially for the poorer classes. At the same time it was shown, that milk with the cream left in it, but diluted with water, loses

in value as a nutritive substance, as the same percentage of albumen is no longer contained in the fraudulent fluid. They all agreed that substances of such a common use as milk should be daily inspected by a government official, and any fraudulent admixture be made widely known.

Treatment of Burns and Scalds.

Dr. C. F. Naismith writes to the *Lancet*, April 12, 1884, that he has secured most excellent results from the following method:

At first he used the soda solution, followed by carron oil, but soon abandoned them as unsatisfactory. The former owes its reputation to the cold water, and not to any soothing property in the soda. His invariable practice, however extensive the scald, has been to place the injured member in ice-cold water, keeping it there till all pain has disappeared—say in from two to four hours, or even longer. The water heats rapidly, and must be kept cold either by ice or constantly renewing. As long as the scalded part is kept under water (provided it is cold enough) no pain is complained of, and symptoms of shock are much lessened. When the limb will bear removal from the water without pain, he lays on thickly lead acetate and resin ointment (one drachm to one ounce), and envelopes in cotton wadding. He has used this ointment also in erysipelas with the best results, all symptoms of inflammation rapidly disappearing. Should severe suppuration occur, instead of the lead acetate a few drops of creasote may be added to the resin ointment, as recommended by Druitt. By this treatment pain and shock are reduced to a minimum, opiates are seldom required, and danger to life is, he believes, greatly averted.

Treatment of Compound Fractures of the Skull.

From the *Brit. Med. Jour.*, March 22, 1884, we learn that Dr. Barling gave before the Midland Medical Society, an abstract of nineteen cases of compound fracture of the skull treated by trephining, and drew attention especially to the mortality after operations, when symptoms had arisen, or when the dura mater was wounded. Of the nineteen cases, nine recovered, all being operated upon immediately after the injury, and the dura being unwounded. Immediate trephining was advocated in all cases of compound depressed fractures, and in incised and punctured fractures, whether symptoms existed or not. If there was any doubt as to the condition of the internal table, it was suggested that the external table might be re-

moved by the trephine, and the state of the inner layer determined. In the list of cases produced, intra-cranial abscess happened three times—one of the patients recovering. The symptoms of intra-cranial abscess were reviewed, especially with reference to their bearing upon these three cases, and the difficulty in localizing the position of the pus. Exploration of the dura mater, and if necessary of the brain substance, was urged, in the presence of indications which might suggest intra-cranial abscess.

Goitre or Cretinism.

From the *Boston M. and S. Jour.*, April 24, 1884, we learn that a curious pathological fact is related by M. Guillaume Chapus in a memoir, "Sur les Médecins et la Médecine en Asie Centrale," which is noticed in a French journal. One town of Turkestan, Kokane by name, is composed in great part of individuals afflicted either with goitre or cretinism. The traveler is struck with the appearance of the inhabitants, who present all degrees of goitre, from a slight fullness to enormous thyroid tumors. The peculiarity in the case consists in the fact that outside this one town goitre and cretinism are very rare. In Kokane the hygienic surroundings seem to be most satisfactory. It is situated in a plain at an elevation of 1300 feet, and is abundantly supplied with pure water from a mountain stream. In 1878 the Russian troops occupied this town, and it was discovered that about a tenth part of the soldiers of the garrison became affected with goitre after a few months' stay. The tumors proved amenable to the external and subcutaneous use of iodine. It was considered prudent, however, to remove the garrison from Kokane, and another town of less pathological interest was selected as the political capital of the province.

Tenacity of Tubercle Bacilli.

It has been doubted whether the sputa of tubercular patients, which are thrown on the streets and later mix with all kind of dust, would ever cause the disease. To determine this question, Dr. Vignal (*Deutsche Mediz. Zeitung*, 1884, No. 1) has collected sputa, as they had been expectorated by phthisical persons in the streets. He mixed them with the common street dirt, moistened them, put them on a porcelain plate, suffered them to dry, again moistened them, again let them dry, and continued these experiments for a very long period of time. Then he made inoculation from these sputa in two Guinea pigs; one

died a few days later from a different, accidental complaint, the other first became fat—a proof of the experimenter's good feeding—then slowly emaciated, and finally, three months later, died. The post-mortem showed a large number of tubercles, many in the state of caseous degeneration, and a great number of bacilli.

This experiment proves that the sputa collecting in the streets and on the floors of dwellings, are by no means innocuous, but serve as pathogenic elements in persons predisposed to this disease.

Albuminuria in Zymotic Diseases.

Those who have been accustomed to look upon albuminuria as an exceedingly common sequel or concomitant of scarlet fever, will be surprised to learn from the *Brit. Med. Jour.*, April 12, 1884, the following from Dr. Middleton, of Glasgow:

"He recorded his experience of the occurrence of albuminuria in the continued fevers, as observed while resident in a fever-hospital some years ago. The conclusions at which he arrived were, that albuminuria occurred in over 85 per cent. of cases of enteric and typhus; that it occurred early in both fevers, from about the end of the first week onwards, lasting generally till convalescence was thoroughly established; that abundance of albumen indicated a severe case, but severe cases were not necessarily associated with abundance of albumen; that tube-casts, hyaline, epithelial, granular, and bloody, were frequently present, and, when abundant, indicated a severe case, especially in enteric fever; and that *albuminuria was probably more common in the febrile stage of typhus and enteric than in the febrile stage of scarlet fever.*"

Sudden Death in Diabetes Mellitus.

From the *Jour. de Med. de Paris*, Feb. 9, 1884, we note that Frerichs has observed (*Zeit. f. Klin. Med.*), the mode of death in 400 cases of diabetes, a considerable number of whom died suddenly. In these instances there was one common characteristic—the final coma. This, however, developed in different ways. Sometimes death was extremely rapid, and caused by a general weakness. At other times it was not so rapid, beginning with cerebral symptoms and a form of dyspnoea, with or without cyanosis, the breath having an odor of acetone or chloroform—this form lasting from three to five days. In a third series of cases the coma gradually developed and deepened without any of

the cerebral manifestations or dyspnœa, but the breath had the same odor as that mentioned above. Frerichs thinks that in the first series the cause of death is paralysis of the heart from degeneration of the muscle; in the two latter groups, that it is brought about by a "diabetic intoxication," the poison of which is unknown, but the substitution products are acetone and acetylic acid.

Effect of Decomposed Flour.

Whenever in consequence of the eating of flour, in the form of bread or otherwise prepared, intoxication developed itself, the latter has been always ascribed to the presence of ergot. Of late it has been proven that the ptomaines (alkaloids forming in decomposing, rotten flour) cause the poisoning, and Prof. J. R. Tarchanow (*St. Petersburg Med. Wochenschrift*, 35, '83) has now demonstrated by experiments that, while the presence of ergot will increase the severity of the symptoms, make the poison more intense, the same intoxication, usually observed after eating products of flour, is produced by the ptomaines without the ergot, and that the length of deviation of the decomposition is of far greater influence on the danger of eating such flour than the presence of ergot, and that on the fifth day of decomposition the ptomaines have the most violent effect, and are then utterly uninfluenced by the presence of ergot. This seems to prove, what Virchow has long ago indicated, that the poisoning from sausages is probably also due to ptomaines.

Membranous Cast of Bowel.

To the Sheffield Medico-Chirurgical Society (meeting March 6, 1884), Mr. Edward Barber gave particulars of a case of chronic inflammation of the bowels, attended with the passage, *per anum*, of large quantities of false membrane, which were, in fact, casts of the bowel. He exhibited the quantity that had been voided in the preceding twenty-four hours. The membrane was of a soft gelatinous consistency, and of a greenish-brown color. The patient was a woman, aged 37, who had been married fourteen years, and had had no children. She suffered a good deal from neuralgia, was of a dull and desponding nature, and was beginning to exhibit symptoms of pronounced hypochondria.

Dr. Law and Dr. Banham referred to similar cases that had occurred in their own practice.

Dr. Keeling pointed out that there was an essential difference between the membranes exhibited and those given off from the uterus in cases of membranous dysmenorrhœa.

Hypodermic Injection of Anthelmintics.

Experimenting with santonate of sodium Dr. Dubois (*Allg. Med. Centr. Zeit.*, 1884, No. 1) made a hypodermic injection of sixteen grains of the drug in a dog. Shortly after, an immense quantity of seat-worms were discharged by the bowel. Not a single untoward symptom, either general or local, followed this method. It would be desirable to have this procedure tried in a larger number of cases, certainly in the human being, for our present way of eliminating worms still leaves a great deal to be desired. Some of the anthelmintics have a miserable taste, or, to be effective, they have to be swallowed in larger, and again in others, in often-repeated doses. The subcutaneous method, if successful, would soon simplify matters and more exactly define the doses necessary, and the irritation of the intestinal canal would be avoided. There are many persons suffering from worms in our country; and many a reader may now have the chance of increasing his reputation and enriching our knowledge by determining the question raised.

Extraction of Teeth by India-Rubber Bands.

In pursuance of this subject, which we mentioned some time since, we note the following in the *Brit. Med. Jour.*, April 12, 1884, from the pen of Dr. H. W. Peard:

In answer to "M. R.'s" query, I would say that the smaller red rubber-bands, such as are used for putting around papers, etc., are capital things for extracting teeth, when applied sufficiently tightly. I used these bands (about two-thirds of an inch in diameter) successfully in two instances. There is no special method, that I am aware of, in using these bands; it is only necessary that one should be twisted several times around the tooth, as close to the gum as possible. The period between the application of the band and the extraction varies, as well as I can ascertain, from one to four days. My experience, I must add, has as yet been only of incisors and bicuspsids.

The Poison of Diphtheria.

The Empress of Germany has awarded the prize for the best work on diphtheria to Professor Otto Heubner, in Leipsic. He proves that in case of suppressed circulation (by occlusion of the capillaries) in the submucosa, œdema, inflammation, and mortification with formation of false membranes, issues in the mucous membranes (Cohn's view); that the poison of diphtheria is still as unknown as that of morbilli, scarlatina,

etc., and that that form of diphtheria heretofore artificially developed in animals is by no means identical with that observed in human beings; and that any substance, causing the above-mentioned morbid condition (occlusion of vessels of supply) will give rise to artificial diphtheria. The proof is clear, and upsets all American discoveries of the micrococcus of diphtheria.

Resection of the Rectum.

Especially in older age, prolapsus of the rectum sometimes is a very annoying symptom. Prof. Mikalicz, in Krakau (*Gazeta Charsha*, 1883, 47) dissected off a 76 ctm. long piece of the rectum. The success was a brilliant one. No untoward symptoms developed themselves, and the case was a radical cure. He simply cut off the whole prolapsed part, save one inch of it; to this he applied the necessary sutures, and then made a reposition of the stump. Dr. Weinlechner (*Deutsche Mediz. Zeit.*, 1, 1883,) at the same time presented to the Vienna Medical Society a woman, æt. 61, in whom he had applied a ligature, in this way cutting off the prolapsed part. On the sixth day from the commencement of the strangulation the prolapsed part dropped off, and the patient was permanently cured.

An Enormous Urinary Calculus.

From the *Med. Times and Gaz.*, March 22, 1884, we learn that at a meeting of the Calcutta Medical Society, Dr. Cayley gave an account (*Indian Medical Gazette* for January) of a case of calculus occurring in a native about fifty years of age, who had for some three years suffered from symptoms of stone, which of late had become very urgent. Lateral lithotomy was attempted, but could not be executed on account of the great depth of the perinæum, and the large size of the calculus. Even after the suprapubic operation had been undertaken, its extraction was found very difficult, as it nearly filled the bladder. When removed, it weighed 25½ ounces. The patient died two days after the operation, and no autopsy was permitted.

Abscess of the Kidney.

In *Prager Med. Woch.* No. 47, 1883, we note that J. Singer reports the case of a man, æt. 25, who, when seven years old, had a fall, from which he had hæmaturia; since that time he has had occasional pain in the region of the left kidney. After an attack of typhoid fever he began to pass blood and pus in the urine, and on examination a fluctuating tumor was found in the left hypo-

chondrium. The tumor then began to disappear, and the man recovered. Singer thinks that the abscess must have discharged into the pelvis of the kidney.

Vicarious Hemorrhage from One Mamma.

The thirty-years-old wife of a peasant asked Dr. P. Beloussow (*Deutsche Med. Zeit.*, 16, 1884,) for advice concerning a secretion of blood from her left mamma. Her menses had made their appearance when she was fifteen years old; in her twenty-fifth year they had suddenly ceased, and after five years of amenorrhœa reappeared, but in a very moderate degree, and simultaneously blood had come drop by drop from the breast. This symptom has since continued without any interruption, only the secretion of blood from the mamma becomes augmented in quantity during menstruation.

B. really succeeded several times in causing a dropping of blood from the mamma by a very light touch; the blood was dark and coagulated.

Can a Man Affected with Syphilis Communicate the Disease to a Healthy Fœtus without Infecting its Mother? Can a Man Beget a Syphilitic Child without Infecting its Mother?

Dr. William R. D. Blackwood discusses this question in the *Med. Times*, April 19, 1884, and thus concludes from the observation of three cases in his late experience:

"The three cases herein noted show, to my mind at least, that, first, a fœtus carried by a non-syphilitic mother and begotten by a non-syphilitic father can be syphilized before birth, and the mother escape constitutional taint; and, second, that a healthy woman may conceive through a syphilitic husband, give birth to a syphilitic child, and, notwithstanding, escape constitutional taint."

Disturbance of Vision and Menstruation.

In the meeting of the French Academy of Medicine of February 19, 1884 (reported originally in the *Deutsche Mediz. Zeitung*, February 25, 1884), Dr. Dor mentioned the case of a young girl, suffering from intermittent hemorrhages of the aqueous humor. As soon as the menses made their appearance, the bleeding in the eyes ceased. In a second case, also of a girl, he found her suffering from hysterical amaurosis. The most searching examination of the eyes failed to reveal any morbid lesion, or the least structural change. The amaurosis disappeared when the menses set in, and the young girl had later normal vision.

Simulation of One-sided Blindness.

To discover simulation of one-sided blindness Dr. Bravais (meeting of French Acad. of Med., February 19, c. report *Deutsche Med. Zeit.*, 16, 1884,) recommends the method of Snellen. This latter consists in the fact that if one writes with a red pencil on paper, the letters written cannot be recognized if seen through red glass. If one holds before the apparently healthy eye a red glass, and before the pretended blind eye any kind of glass, or none at all, and requests the simulator to read the red letters on the paper (which have not been before shown to him) and he can read them, the evidence of his simulating is clear; if the second eye had really been blind, he would not have been able to recognize the red letters through the red glass.

Varicella Nephritis.

Prof. Henoch tells us in a recent issue of the *Berlin Klin. Woch.* that he has never read of nephritis following varicella, and yet he has recently observed four cases. In all the cases, at the end of from eight to fourteen days from the appearance of the eruption, there was œdema with albuminous urine and tube casts. In three of the cases, recovery took place in a few weeks, under the use of diaphoretics, with Bilin water or acetate of potash as a diuretic. One, a girl aged two years, who was the subject of congenital syphilis, died; and after death there were found œdema of the lungs and hypertrophy of the left ventricle.

CORRESPONDENCE.

Cretaceous Deposit in the Placenta.

EDS. MED. AND SURG. REPORTER:—

I notice in the issue of May 3, 1883, of the MEDICAL AND SURGICAL REPORTER an article from the pen of Dr. W. H. Dearing, of Malvern, Iowa, entitled "Partial Ossification of the Uterine Surface of the Placenta." While visiting in Iowa last September, I was called in consultation to a case of obstetrics, of which the above cited case reminds me:

The woman, a primipara, aged 27; labor tardy. This was probably caused by a slight narrowing of the inferior strait of the pelvis. After waiting nearly twenty-four hours, it was decided to deliver instrumentally. This was done without trouble or accident, save a very slight rupture of the perineum; the placenta also came away without trouble, but on examining it my friend, Dr. W., called my attention to its uterine surface, which was completely covered with what seemed to be calcareous deposit. Knowing that the water in that section was highly impregnated with lime

salts, and thinking this the probable cause, and that it *might* be a frequent occurrence in this locality, it was dismissed from my mind till seeing a case related by a physician residing in the same State.

W. H. DUDLEY, M. D.

Norwich, Conn.

Note to Article on Hemorrhages of the Ear.

EDS. MED. AND SURG. REPORTER:—

In the MEDICAL AND SURGICAL REPORTER of March 29, 1884, I omitted to notice that in case of falls upon the head, bleeding of a severe and protracted nature takes place from one or both ears, followed by the escape of clear fluid, and this is one of the important and characteristic signs of fracture of the base of the skull. This fluid is from the subarachnoid space. Sometimes a serous discharge may come from the labyrinth, and this is to be distinguished from the cerebro-spinal fluid by the large quantity of albumen which it contains, and which can be coagulated by heat and nitric acid. The cerebro-spinal fluid contains double the quantity of chloride of sodium, and only a trace of albumen, so as not to be coagulated by heat and nitric acid. I also notice in my work on "Diseases of the Ear," p. 116, that at times severe bleeding takes place after removal of fibro-gelatinous polypi from the ear, but is generally relieved by syringing the canal with ice water. Hemorrhage frequently follows the operation of Wilde's incision for deep-seated abscess or perforation of the mastoid cells, but fortunately pressure can be applied with a pledget of cotton saturated with Pancoast's styptic solution or the persulphate of iron. If the transverse sinus is opened by mistake, this is to be plugged with ivory or wood. (p. 196, op. cit.) In Bright's disease of the kidneys, I have found the middle ear filled with blood, being a vicarious hemorrhage which destroyed the integrity of the hearing by pressure upon the labyrinth.

LAWRENCE TURNBULL, M. D.

Philadelphia.

A Case of Conception Without Intromission.

EDS. MED. AND SURGICAL REPORTER:

Mrs. A——, aged nineteen, a native of Ireland, called on me for an examination. She had menstruated regularly and comfortably until after her marriage, some three months previously. As coition was out of the question, her condition seemed to her a mystery. On examination, I found the hymen closing the os externum.

After a long and diligent search, found a foramen close under the urethra, where I depressed the hymen half an inch, and introduced a number eleven bougie, and with my finger in the rectum, succeeded in penetrating a distance of nearly two inches through the firm, inelastic hymen, when the point plunged into the vagina. This condition was undoubtedly congenital.

All of her symptoms indicated pregnancy. Dilatation was tried without success, then I operated with director and scalpel.

In six months after, I attended the lady in confinement, which was normal, and she had a good recovery. In this case the spermatozoa were abandoned in the depression of the hymen, and traveled through the narrow channel two inches

long into the vagina, and continued their journey to the uterus to fecundate the ova.

This fact, with others of the same kind, demonstrate not only the possibility, but the actual accomplishment of impregnation, where the spermatozoa were abandoned a long distance from the uterus.

H. E. LONGSHORE, M. D.

Philadelphia, Pa.

Treatment of Pruritus Ani.

EDS. MED. AND SURG. REPORTER :—

E. R. S. asks for a treatment of pruritus ani, and also of ascarides. The causes of pruritus ani are either general or local. Sometimes the cause is entirely local; but most frequently it is both general and local. These causes should be, if possible, ascertained. The patient should be instructed to wash his anus well with a cloth wet with cold water immediately after each action of the bowels—this cleanliness is an exceedingly important agent in the treatment of the disease—and after so washing and drying himself, to bathe his anus well with the following:

R. Hyposulphite of soda,	3j.
Carbolic acid,	grs. x.
Glycerine,	3j.
Aqua distil.,	3 vij. M.

For a lotion.

Whenever the itching returns the application of the lotion is to be repeated and continued until the disease is arrested. Sometimes a good result is obtained by dusting over the anus the following:

R. Iodoform,	3j.
Tannic acid,	grs. x. M.

For a powder. Use two or three times a day.

I have found an injection of two ounces of an infusion of pulv. aloes (3j. to the pint of boiling water), night and morning, with a teaspoonful or two, twice or thrice a day, for three or four days, of the following mixture, to be most efficient in the removal of ascarides:

R. Santonin,	3j.
Pulv. jalap.,	3ij.
Fld. ext. spigelia,	3j.
Fld. ext. senna,	3ss.
Syrup sarsaparilla comp.,	3jss. M.

Shake well. Sig., Dose, one to two teaspoonfuls three times a day, followed in a few days, if indicated, with suitable doses of mur. tinct. of iron in an infusion of quassia.

J. B. JOHNSON, M. D.

Washington City, D. C.

Treatment Wanted.

EDS. MED. AND SURG. REPORTER :—

I have been treating the following described case for about eight months with but little success. If some of your readers would give a treatment for it, it would greatly oblige both me and my patient:

Female; age, fifty-seven years. Change of life occurred about eight years ago. Has been healthy, with the exception of the present trouble, ever since. Weighs about 145 pounds. Tall, light complexion, good appetite. Her trouble consists in an intense pain at the pit of stomach, which will dart to the region between shoulders, or

small of back, thence back to pit of stomach; pulse, 72 to 80, very full and strong; temperature, normal; bowels and kidneys regular. The attacks are usually preceded by pain in left foot and ankle, and sometimes left leg, and end by severe vomiting of a large quantity of bile which produces prostration. When cut short by morphine, it requires from one to four days for recovery. The attacks occur irregularly, with an intermission of from five days to three weeks.

My treatment has been varied. I am always compelled to give, sooner or later, morphine by hypodermic injection, which always makes her very sick. Other narcotics, as bromide of potash and chloral hydrate combined, chloroform, laudanum, paregoric, have been tried without relief, while chlorodyne was used with relief for a while only. Treatment in intermission consisted in giving quinine, muriate of ammonia, arsenic, phosphate of soda, and tonics (iron, arsenic, strychnia, etc.) quinia doing the most good of these. During one attack, I attempted bleeding, but succeeded in taking only a little blood; the attack, however, was short and light.

Reelsville, Ind.

G. W. S., M. D.

Salicylic Acid in Cerebro-Spinal Meningitis.

EDS. MED. AND SURG. REPORTER :—

In the REPORTER of March 29th, I notice a malicious personal reply, by Dr. J. B. Weener, to an extract in your number of March 8th, from an article published by me in the February number of the *St. Louis Cour. of Med.*

The article in question was read three months or more before its publication, at the meeting of our County Medical Society—Dr. Weener being present and president of the society.

After the paper was read, and in the presence of the members present at that time, he arose and said that he could testify to the good effects of the salicylic acid in cerebro-spinal meningitis, but never once making any claim whatever to priority in using it.

Among the physicians present were Drs. E. V. Spencer and S. H. Pearse, of this place, Dr. L. B. Bitz, of Blairsville, and Dr. E. H. Gregory, of St. Louis, Mo.

The article was prepared especially for the County Medical Society, I having been appointed to read a paper at that meeting; and being advised by two prominent medical men to publish it, remembering a principle inculcated from my preceptors, that whether young or old, if you know you have learned something that is valuable to the profession, make it known, or you will be doing a great wrong, I did so.

For two years after the occurrence of the epidemic here, I investigated the subject thoroughly, and read the history of epidemics that occurred elsewhere; and it was only after deliberation of this character that I became aware of the value of my success with this treatment. Neither Dr. J. B. Weener nor any other person ever suggested to me a single idea or word that occurs in my original article. I used the salicylic acid in solution, prescribing liq. ammon. acetat. as the solvent.

My age and conditions of partnership once made with Dr. Weener are of course strong (?) arguments against the value and truthfulness of my

statements, and deeply interesting (?) reading for a medical profession hunting for something practical.

As to there being in our profession "young men who like to air themselves, appear in print, and have their names sounded abroad in the land," it has also been said that there exist within our ranks old men, who are fogies, croakers, and have petty professional jealousies, that influence them to such an extent, if seeing an article in a medical journal with the name of a professional neighbor (younger than themselves) attached to it, they write a reply (never having had anything occur, in a practice of twenty years or more, in their opinion worth publishing), giving the author's age, claiming the idea as their own and only, and inclosing it with great care in personal insinuations.

At least, it is queer that one would at so late a date, after a paper being read in his presence before a body of medical men, make such a statement, and publish it in a journal foreign to the one in which the original was published.

I would have replied sooner, but could not until now obtain a copy of the *REPORTER* which contained the statement. D. C. RAMSEY, M. D.

Mt. Vernon, Ind.

NEWS AND MISCELLANY.

Tuberculosis.

A CARD FROM DR. SHAKESPEARE.

Dr. Shakespeare, in discussing the question of tuberculosis, opened by Dr. Formad at the recent meeting of the American Medical Association, stated that he had accepted the invitation of the committee under a misapprehension of the extent of time that would be devoted to the consideration of this most important matter. He did not believe that a mere expression of opinions, without a full examination of the grounds upon which they are based, could have any weight in the settlement of such grave questions in pathology. The time allotted for this discussion could neither do justice to the subject, nor credit to the Association or those taking part in the debate. With this protest, he expressed himself as follows:

1. He admitted, as absolutely proven, that the tubercle bacillus is usually present in tuberculous lesions; that it is usually present in the sputum of phthisical patients; that when present it constituted a most valuable diagnostic sign of the presence and activity of the tuberculous process; that it has characteristics by which it can be easily and certainly distinguished from other known bacilli.

2. He considered it established, by overwhelming evidence, that the tuberculous process once started in any part, other portions of the animal economy can thence become infected by transportation of the pathogenic agent.

3. He regarded it as demonstrated, that there is something in the tuberculous lesions of one animal which, when transported to and properly implanted in the tissues of another animal "receptive" or predisposed to the disease, can excite the tuberculous process in that animal.

4. He believed it amply proved that the tubercle bacillus is virulently capable of exciting and continuing the tuberculous process in living beings when, after introduction, it meets conditions favorable to growth and propagation.

5. He thought that there exists abundant support for the belief that the human race is largely "receptive" or predisposed to the tuberculous process, and he could not escape the conviction that the tuberculous process in man and in lower animals is essentially the same, with respect to its cause and its course.

5. He therefore was forced consistently and logically to admit that tuberculosis is often an infectious disease, and is often caused by the tubercle bacillus acting as a specific pathogenic parasitic agent.

On the other hand, whilst he was not now ready to concede that, by actual proof, it has been shown that no other agent than the tubercle bacillus can excite the tuberculous process, he at the same time most strenuously denied that it has been satisfactorily proven that anything else is endowed with such a power.

Entertaining these views, he recognized the importance of the destruction of excretions containing bacilli or their spores, and so appreciated the danger of possible infection of the well by the sick, that he would forbid the occupation of a common bed in private dwellings, and would, when possible, isolate phthisical patients in hospitals from those otherwise afflicted.

During his remaining time, Dr. Shakespeare adversely criticised Dr. Formad's acceptance of the etiology of tuberculosis.

In the first place, the methods which had been followed of preparation of sections of tissue for microscopic examination were not only incapable of demonstrating peculiarities in the lymph spaces of connective tissue, but they were not such as would make the lymph spaces extremely difficult, if not indeed quite impossible to see at all. In the second place, the tissues examined comprised only the cutis, the subcutaneous connective tissue, and the intermuscular connective tissue. The investigation did not extend to the lymph spaces of the lungs, the liver, the spleen, the kidneys, or the brain. Yet every one well knows that it is not in the skin or in the intermuscular connective tissue that the tuberculous process works, but almost always in the above-named viscera. In the third place, Dr. Formad unknowingly has himself laid the foundation of an objection to his theory, which by itself is fatal to it. He distinctly states that the peculiarities of lymph spaces in the connective tissue of the so-called scrofulous animals and men are not observable in the perivascular lymph spaces. He also most positively states that it is just in the perivascular lymph spaces that not only secondary miliary tubercle, but also primary tubercle, originates, and this is a well-known fact, of which every pathologist is cognizant. What then has an assumed peculiarity of lymph spaces in a tissue not subject to tubercule, to do with the etiology of the formation of tubercles in a location where the lymph channels are unobstructed, and where, by Dr. Formad's own admission, they appear the same in the scrofulous as in the non-scrofulous?

Furthermore, Dr. Formad mistakes, in his the-

ory, a predisposing for an exciting cause. When he shall have demonstrated beyond the possibility of doubt, this assumed peculiarity in the anatomy of the scrofulous, nothing more will have been done than an explanation given of the well-known *predisposition* certain animals and men have towards tuberculosis. Such a peculiarity could only enhance the power which the *exciting* case of tuberculosis may have, by making its work more easy. It certainly would favor, not antagonize, the action of the tubercle bacillus.

Are a Physician's Carriage and Harness "Tools of his Occupations?"

A suit of considerable importance, especially to country physicians, was recently tried in New Hampshire. The question at issue was whether a physician who was in debt could keep from his creditors his carriage and harness under the provisions of the statute, which exempted from execution tools of a person's occupation. The decision was as follows:

"The court cannot say, as a matter of law, that a wagon or a harness is a tool of a physician's calling, and so exempt to all physicians, nor can they say that it is not such a tool. The most that can be said, as a matter of law, is that it may be a tool of his profession, if, in the particular case, it is reasonably necessary for him to use it as a tool. If it should appear that his practice was confined to his office, or that he was a physician or surgeon in a hospital, attending to no cases outside of the institution, or that he was a surgeon on shipboard, or that he went on foot, or on horseback, or on the cars, to visit his patients, a wagon and harness would not be exempt under our statute, because they would be of no use to him as tools in his practice.

"They might be of use to him in other respects, as in going to church, or in carrying his children to school, or in visiting friends, or as a means of recreation and pleasure; but these uses are manifestly not within the legitimate scope of the technical duty of a physician. Not coming within the strict definition of the term tools, and not being reasonably necessary as tools for him in his practice of his profession, they would not be tools within the meaning of the statute, and so would not be exempt as such.

But if it should be found that the physician claiming the exemption could not practice his profession with reasonable success without a team with which to visit his patients—that he was located in a country town, for example, where it was necessary for him to ride a large part of the time in order to accomplish anything professionally—a wagon and harness might properly be found to be reasonably necessary for him as tools of his occupation. But the finding would be one of fact, so far as the reasonableness of the use is concerned, and it could not be said that these articles are exempt to every physician, or to physicians generally, but only to the debtor in the particular case. If there is any doubt whether an article claimed to be exempt from attachment is a tool under the Statute, the question should be submitted to the jury whether its use as a tool by the debtor in his business is reasonably necessary. If it is, it is exempt; otherwise, it is not exempt."

Nurses in Pest-Houses.

A recent case in a New England State touched on the authority of health officers to employ nurses, at the expense of the town, to attend on persons committed by them to the pest-house, and the court said:

"Having power to compel the confinement of infected persons and prevent their communication with others, and having exercised this power, it became their duty to provide for the wants of those confined there.

"They could not shut them out from communication with their friends and with the world and deprive them of any means of obtaining assistance, and at the same time lawfully withhold necessary support and care.

"They could not establish a hospital without ordinary hospital accommodations, and they could not make the hospital a place of involuntary confinement, and escape the duty of supplying the reasonable wants of those who by confinement and seclusion were prevented from applying to any one else for relief. They could not furnish relief against the will of those confined, and afterward recover the expense from them or from those liable in law to support them. If the health officers were obliged by law to confine persons infected with dangerous diseases, and it was their duty to nurse and support them, and if they could not recover the reasonable expense from them or their guardians, they would be remediless unless they could charge the expense upon the city. The law does not require the performance of a duty, and at the same time withhold the means reasonably necessary to its performance."

A Bar to Malpractice Suits.

A case tried not long since in one of the Western States brought up the question whether a successful suit by a physician for the value of his services did not bar any subsequent suit by the patient for malpractice, and it was held that it did. The first suit was litigated to decide the point of the value of the services, and although the charge of malpractice was not directly made as in the second suit, yet if there had been any malpractice there would, of course, have been no value to the services. The failure to make the charge in the first suit was held to forever prevent its being raised afterwards.

Capital Punishment in Delaware.

The Governor of Delaware not long since deprived a criminal under sentence of death for the long term of *fifty-six* years. The law of the state forbade the commutation of death sentences, but permitted reprieves. There seemed to be some mitigating circumstances in the case in question, and the Governor wished to exercise clemency, but could not under the law, except in the way stated. The case may have been a deserving one, but the method adopted was certainly a palpable evasion of the Statute.

Errata.

On page 612 (May 17), line 18 from top, for $\frac{7}{8}$ inch read 7 by 8 inches.

Items.

—An unknown country editor sarcastically remarks: "If many people knew how to pay their subscriptions as well as they know how to run a newspaper, editors would have an easier time of it."

—In the *Columbus Medical Journal*, May, 1884, Dr. B. M. Ricketts reports a case of scarlet fever resulting in abscesses of the neck and elbow joint, with ankylosis, perforation of right tympanum, and total destruction of right cornea.

—Prof. Voltolini, in Breslau, has often noticed that discharge from the ear was followed by tubercular phthisis of the lungs, and *vice versa*. He has recently examined the discharge, and discovered bacilli in it, a proof of the causal connection.

—At the Berlin University are at present matriculated (having either the certificate of the gymnasium, or passed the necessary examination regarding their classical education), 4635 students; of these, 898 study medicine, and of these 180 are from Berlin, 27 from Russia, 22 from America, and 7 from Japan.

—Of the physicians who died during 1883 in England, the *Lancet* mentions these 35 as having reached a high age as follows: Two 95, two 94, two 92, one 91, two 90, one 89, three 88, three 87, five 86, two 85, three 84, four 83, one 82, and four 80, while a far larger number lived more than 70 years.

—According to a report in the *Wratsch* (transl. Physician, a Russian weekly medical paper), on November 28, last year an epidemic of cholera broke out in the girl's Puschkin-school in Moskau. Within fifteen minutes eighteen of the girls were seized by the disease, which, however, soon disappeared. It probably was hysteric in character.

—Prof. Henoch, the celebrated authority on diseases of children at the Berlin University, has demonstrated the occurrence of kidney complication in varicella, and published four cases in evidence. It may be better to pay the same attention to children suffering from varicella, as is done to those attacked by scarlatina, *i. e.*, keep them in the room, and guard them against chilling of the skin.

—The following report shows the value of ostrich farming going on in Southern California: "The ostriches on the Anaheim farm laid 305 eggs during the season from the 1st of May last until the 1st of October. The birds have been plucked twice since their arrival on the farm. The first clip, in May last, yielded \$500. The clip in December yielded 2,500 quills of all kinds, from 18 birds, and is valued at \$1,000.

—Vomacka gives the following directions for the preparation of a substitute for blue ointment, which also keeps better: One part of soft and perfectly neutral potash soap is mixed with a little glycerin in a glass mortar, and one part of mercury is added with constant trituration. When no globules of mercury are any longer visible, add two parts more of potash soap to make four parts. It may be scented with lavender or other essential oil.

—At a meeting of the Alumni of Jefferson Medical College held to take action respecting the

death of Dr. J. Marion Sims, the late Prof. S. D. Gross said, "This man died poor." Thus it appears that this man, the most courted of any doctor that ever lived, by all classes, among the noble and crowned heads, died poor. What shall he expect who lives his professional life among the operatives of farms, factories, stores, etc. Can he expect to die richer than one who had for his services any sum he might ask? Truly, the practice of medicine is a poor business, whatever may be said of it as a profession.

—Prince Carl Theodore, of Bavaria, who graduated as M. D., and has gained well-merited local reputation as an eye physician, was recently honored by the University of Munich, which gave him the honorary doctor diploma. Prinz Ferdinand of Bavaria has also finished his medical studies, and passed his examination as M. D. Both having also passed the German State's examination, are legally entitled to practice. The older, Carl Theodore, has become widely known by the publication of a work on the comparative anatomy of the tongue, which is an evidence of deep learning—it is said that he wrote the work under supervision of Prof. Rüdinger.

 QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.—

Is com. tinct. avena sativa, as found in the shops, what it purports to be, viz.: a pure tincture of common oats? If so, was it not *mistakenly* omitted from the last revision of the Pharmacopœia? I have known a number of sufferers from painful nervous disorders to be much relieved by it. Is any sophistication of a narcotic nature known to be practiced in its preparation? A DOCTOR.

 MARRIAGES.

BARNES—SAINT.—At the residence of the bride's parents, Sharpshurg, Allegheny county, Pa., on Thursday morning, April 24, 1884, by Rev. S. M. Bell, assisted by Rev. W. M. Eaton, of Washington, Pa., Samuel S. P. Barnes, M. D., of Massillon, Ohio, and Emily J., daughter of James Saint, Esq.

HARE—PEMBERTON.—In this city, Thursday, May 8, 1884, Dr. Hobart Emory Hare and Rebecca Clifford, daughter of Clifford Pemberton, Esq.

HAYS—HOLEMAN.—At the residence of the bride's father, in Louisville, May 13, 1884, Dr. H. H. Hays, of New Liberty, Ky., and Miss Anna W. Holeman.

HINKLE—CAMPBELL.—At Arch Street Presbyterian Church, May 19, 1884, by the Rev. John S. Sands, Dr. Frank Whitehill Hinkle, of Buffalo, and Kate Allen Campbell, of Philadelphia.

 DEATHS.

BLAUVELT.—In New York, Saturday, May 17, 1884, Jas. F. Blauvelt, M. D., in the sixty-first year of his age.

FLAGG.—At Yonkers, N. Y., May 15, 1884, L. W. Flagg, M. D., aged sixty-seven years.

HARLEY.—In Cincinnati, Ohio, May 16, 1884, Dr. E. T. Harley.

HIBBARD.—At Elizabeth, N. J., May 17, 1884, of apoplexy, Dr. Rufus F. Hibbard, in the eightieth year of his age.

HUNTER.—At Macon, Tenn., May 12, 1884, Dr. George Alva Hunter, brother of R. E. Hunter, of Memphis, in the thirty-seventh year of his age.

ROGERS.—In Sparta, Ga., May 14, 1884, by lightning, Dr. Wilbur J. Rogers.

TINDALL.—In Aberdeen, Miss., May 15, 1884, Dr. John L. Tindall, over forty years in the medical profession.

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ORIGINAL DEPARTMENT.

LECTURE.

PLASTIC SURGERY.

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Of New York.

Delivered before the Hudson Co. (N. J.) Medical Society.

Reported by J. A. EXTON, M. D.

At the meeting of the Hudson County Medical Society of New Jersey, held April 1st, in Jersey City, after the regular business was finished, Prof. A. C. Post, of New York, delivered a very interesting and instructive lecture, illustrated by diagrams, photographs, etc., showing the results of rhinoplastic, blepharoplastic, cheeloplastic and heteroplastic operations in plastic surgery.

Prof. Post said by the term plastic surgery was understood the branch of the healing art which aims to supply deficiencies on the surface of the body, resulting from congenital malformation, from traumatism, or from disease. The term plastic is derived from the Greek verb *πλασσω*—I form.

Plastic operations consist in the detachment of flaps from neighboring or distant parts, and uniting them with the surface and edges of the vacant space which is required to be filled. The term anoplastic is sometimes employed, the prefix *an* signifying up, and the term implying the forming or building up of the parts to their proper level.

The term autoplastic conveys the idea that the transplanted parts are derived from the patient himself. The term heteroplastic signifies that the new tissue is derived from another person, or from an inferior animal. Blepharoplastic operations are those which are performed to repair de-

fective eyelids. Rhinoplastic operations are for defects of the nose. Cheeloplastic for those of the lips. Prosopoplastic, for those of the face in general.

In most of the operations for the repair of lost or defective features, the transplated flap is best attached by some part of its circumference to the part with which it was naturally connected, until it has acquired a vital union with the part to which it is artificially attached. The portion of the flap which retains its natural connections is called its neck or peduncle.

There are three methods of transplanting pedunculated flaps, known as the Italian, the Indian, and the French methods. Plastic operations were performed by the ancient Egyptians, Greeks, and Romans. In modern times Branca performed rhinoplastic operations in Sicily in 1442.

In 1597, Jaspas Sagliacossi, professor at Bologna, published at Venice a book entitled "*De Curto-rum Churgia per Insitionium*." In this book he gave a detailed account of his operations for the restoration of lost noses and other features. This book acquired a world-wide celebrity. This mode of operating consisted chiefly of the transplantation of flaps from the integument of the arm, the hand being bandaged to the head during the process of union. Fabulous accounts of his operations were published, representing the excision of flaps from a poor man's nates to supply the deficiency of a rich man's nose, and it was asserted that the vitality of the new nose depended on the life of the person from whom it was taken. A story is related of a nobleman whose nose was formed from the integument of a Florentine peasant, and which retained its vitality for a number

of years. Suddenly, without any obvious cause, the nose died and became a putrid mass. On inquiry, it was ascertained that the death of the nose coincided with that of the peasant from whom the material for its construction was obtained.

Butler, in his "Hudibras," alludes to such fabulous rumors, when he writes:

"Thus learned Taliacotius, from
The brawny part of portus bum,
Cut supplemental noses, which
Would last as long as parent breech,
But when the date of Nock was out,
Off dropped the supplemental snout."

The mode of repairing defective parts by transplanting flaps from remote regions is called Italian or Talicottian method. The mode of operating by transplanting flaps from adjacent parts, and twisting the peduncle so as to bring the flap into its proper position, is known as the Indian method, having long been practiced in Hindostan, and having been made known to European surgeons about the close of the eighteenth century.

It had long been the custom of the native tyrants of India to mutilate their rebellious subjects by cutting off their noses, and as "necessity is the mother of invention," the persons who were mutilated exercised their ingenuity in finding a remedy for the disfigurement resulting from the mutilation. The operation for this purpose was not performed by physicians or surgeons, but by a class of artisans who were engaged in pottery. The Indian operation for the restoration of lost noses consisted in freshening the edges of the space from which the nose had been excised, and cutting a flap from the integument of the forehead, and twisting its peduncle so as to bring the flap into the position of the nose, and fixing it so as to secure union with the adjacent parts.

The same principle is applicable to the restoration of other features besides the nose. The Indian operation of rhinoplasty was performed in London in 1803, but the first operation was unsuccessful. The first successful operation in Europe was performed in London by Mr. Corpue, in 1814. The operation has since been performed many times by surgeons in different parts of Europe and America. The result of the operation has been quite satisfactory, when enough of the original nose has remained to support the transplanted flap in its new position. But in cases in which the nose has been entirely destroyed, the new organ is an imperfect substitute for the old one, presenting a flattened or depressed appearance. But even in these cases, the new nose

is a decided improvement on the cavernous depression which preceded its formation. The French method of performing plastic operations consists in cutting flaps in the vicinity of the defective part, and gliding them into position without twisting the peduncle to any considerable extent.

The Italian method of restoring lost features, by transplanting skin from remote parts, is now very seldom resorted to, except in those cases in which there is no available material in the immediate neighborhood.

The Indian method is often employed, and yields very excellent results. In many cases where the nose or the eyelid is the feature to be repaired, it is the only available method. The French method, by gliding the flap into place without twisting its peduncle, is the best operation in cases in which it is applicable, especially in supplying deficiencies of the lips and cheeks. The principal difficulty to be contended with is the tension of the flap, when it is brought into its new position. This difficulty may, however, in most cases be obviated by giving a decided curve to the peduncle of the flap. In the performance of plastic operations, certain facts have been observed, to which it is proper to direct your attention. On making the *first* incision, the flap becomes pale, but afterwards the parts adjacent to the connecting medium assume a redder color. Dark bluish spots or streaks are often found scattered through the flap. Blood spouts at first from the arteries at the edges of the flap, and afterwards fibrine is effused. The flap contracts considerably, and is disposed to turn inwards; it also acquires an increase of thickness. These changes are most distinctly perceptible in young persons of healthy constitution. The flap loses all sensibility, except at the extremity by which it is nourished, and even there the sensibility is but slight. The flap should be one-fourth or one-third larger than the space which it is designed to fill, and a wide bridge should be left, connecting it with the adjacent part. The flap should contain not only the skin, but a considerable thickness of the subjacent parts, so as to afford a good vascular supply. It is highly important that it should be easily held in position, as any considerable tension will be likely to hinder its adhesion to the adjacent parts. In cutting the flap, it is well to make a pattern of oiled silk or other suitable material, of the size and shape of the space to be filled, and to use the pattern as a guide in making the flap.

In fixing the transplanted flap in its new posi-

tion, one or two pin sutures may be advantageously employed. These should include nearly or quite the whole thickness of the flap, and the points of entrance and exit of the pins should be at least eight or ten millimetres from the edges of the wound. Numerous sutures of fine *black silk* should be employed to secure a perfect apposition of the edges of the wound. The spaces between the sutures should not exceed two or three millimetres. Black silk is preferable to white, as being less irritating, and being more easily seen. The fineness of the silk is indicated by the letter O on the spools. In introducing the sutures, if the edges of the wound are of unequal thickness, the needle should be introduced more superficially on the thicker side.

Before closing the wound, it may be freely irrigated with a solution of mercurial bi-chloride, eight grains to the pint. After applying the sutures, there is no occasion for applying bandages or plaster, but the surface may be freely exposed to the air. When the flap is congested, cold-water dressings may be applied. On the ninth or tenth day, all inflammatory swelling has generally subsided, and the cuticle cracks and peels off. When the flap has been taken from the hairy scalp, the hairs, after a time, will grow, and they may, from time to time, be plucked with forceps. The growth of the hair may be diminished by the free application of lime-water, or of a solution of bi-chloride hydrate. Or the hair-bulbs may be destroyed one by one by a galvanocautery.

In blepharoplastic operations, when the eyebrow has been destroyed, it may be replaced by a flap from the hairy scalp, the hairs being allowed to grow over the space corresponding with the eyebrow, those above and below being plucked or destroyed. When I first restored the eyebrows in this way, I supposed that the practice was original with myself; but I was afterwards informed that I had been anticipated by Dr. Pancoast, of Philadelphia.

To give proper shape to the newly-formed feature, it is often necessary to excise here and there small portions of the newly-transplanted integument. This may be done without hesitation, as wounds in recently transplanted integument heal by the first intention and with great rapidity; much more so than wounds in other parts. This observation is made by Dieffenbach, and I have often verified it in my own practice. When these wounds are allowed to granulate, they bleed freely at first, and the blood is very bright and liquid; the wound appears pale, and the edges

are scarcely inflamed; there is little or no suppuration, and the exuded blood forms a scale or scab which after awhile falls off, leaving the wound healed.

When it becomes necessary to separate the edge of the flap from its new attachment, it never heals by the first intention, but always goes through a tedious process of granulation. Sensation is very slowly developed in transplanted parts. Many months, for example, elapse before a new nose, transplanted from the forehead, becomes sensible to pain. Sensibility is first restored near the line of union with the adjacent parts. The newly-formed feature does not begin to perspire, nor to form thick pus when wounded, before twelve months. There is much difference in different cases, in the power of withstanding cold possessed by the transplanted part. A patient, for whom Dieffenbach made a new nose, was attacked with jaundice eighteen months afterward: the whole body, with the exception of the nose, was of a deep yellow color when the patient was warm; the nose was white. When he was cold it was of a dark bluish hue.

The treatment of the cicatricial contractions is a matter of great importance. It is not safe to include cicatricial tissue in flaps which are to be transplanted, or to raise it to any considerable extent from the subjacent parts, as it almost invariably sloughs when it is so treated. But it may be freely divided, and the flap of healthy skin may be united with its divided margin, with a good prospect of union by the first intention. It may be divided into narrow segments by incisions crossing each other at short intervals, and may then be put upon the stretch, and it will not slough if the sub-basal attachments be not interfered with.

Certain special modes of operating, which have been introduced by different surgeons, are worthy of attention.

Dieffenbach introduced the important improvement in treating the deformity occasioned by the loss of the nasal septum from syphilitic disease, and the sinking of the remnants of the nasal pyramid into the cavity. He made longitudinal incisions dividing the nasal pyramid into five strips, attached above and below, and raised them to their proper position, fixing them with pins and sutures.

T. Wharton Jones, in certain cases of ectropion, made a deep triangular flap, the base of which was formed by the margin of the everted lid, and bringing the margin of the lid into its normal position caused the apex of the flap to recede widely

from the part from which it was taken, converting the shape of the wound from the letter V to Y, and fixing the flap in its new position by sutures. This ingenious operation is applicable to other parts besides the eyelids.

Burow, a German surgeon, introduced a new operation for certain deformities of the lips, in which there is a great deficiency in the lower lip and a relative superfluity in the upper lip, or *vice versa*. He took out a triangular portion from the diseased lip, the base of the triangle corresponding with the vermillion border, and extending on one side to the angle of the mouth; and extending the line of the base by an incision into the cheek, he excised another triangle, with its apex in the opposite direction, and uniting the opposite sides of the two triangles by sutures, restored the symmetry of the mouth, lengthening the shortened margin of one lip and shortening the superfluous margin of the other.

In all cheeloplastic operations, it is important that the margin of the newly-constructed lip should be invested with mucous membrane. When a flap has been transplanted from the cheek, the mucous membrane should be drawn out over the margin and attached to the skin by fine sutures.

When there is no healthy mucous membrane for the purpose, the skin itself may sometimes be inverted over the margin.

Within the past fifteen years a new mode of supplying deficiencies of integument upon the surface of the body has been introduced, viz.: transplanting thin portions of skin without peduncles upon recent wounds, or upon granulating surfaces, and maintaining them in position by plasters and bandages. The name skin-grafting, or epidermic grafting, has been applied to this process. It is somewhat analogous to the process of budding or grafting fruit trees. The practice was introduced by Reverdian, a French surgeon, in 1869. Reverdian was at that time Interne in one of the French Hospitals. He shaved off very thin portions of integument of the size of a grain of rice, and applied them with their raw surfaces to the denuded or granulating surface of the part which he wished to invest with new skin. Close apposition was maintained for a number of days, and on removing the dressings, it was found that some of the grafts had acquired a vital union with the surface upon which they had been placed, and from each one of these points there was a radiated growth of new skin. This has now become an established practice in surgery, and it has become a valuable addition to our resources in cases in which there has been an extensive loss of skin.

The practice has been modified by See, Ollier, and Poncet, who successfully transplanted large portions of skin, in some cases larger than a silver dollar.

In grafting portions of skin without peduncles, a very different course is to be pursued from that which is adopted in the transplantation of pedunculated flaps. Instead of including a considerable thickness of subcutaneous tissue, the part to be transplanted should be cut very thin, never including any subcutaneous tissues, and often including less than the whole thickness of the skin.

This mode of grafting has the advantage that it can be applied where there is no available sound skin in the vicinity of the part which is to be restored, and that the new material may be obtained from parts of the body which are covered by clothing, so that the patient will not be disfigured by the cicatrices which follow the excision of the flaps. On the other hand, it has the disadvantage that it does not provide a flap of considerable thickness, such as is required for the restoration of the lips, where the skin must be lined with mucous membrane, to perform its function in a satisfactory manner. The operation is a useful one under some circumstances, but it is not likely to supersede the transplantation of pedunculated flaps.

COMMUNICATIONS.

THE TIME REQUIRED BY THE BLOOD FOR MAKING ONE COMPLETE CIRCUIT OF THE BODY.

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(Continued from page 681.)

The following are the details of two experiments made on this plan:

Experiment 1.—Nov. 24, 1883. Dog. Weight 18 kilo. Experiment conducted as described above; effects of ether had largely passed off before the experiment was made. Time required for pigeon's corpuscle to pass from the left to the right jugular, 20 seconds. Pulse in 20 seconds = 55.

BEFORE INJECTION.

Blood pressure.	Pulse in 15 Sec.	Respiration in 15 Sec.
160 mm.	36	6

AFTER INJECTION.

Blood pressure.	Pulse in 15 Sec.	Respiration in 15 Sec.
5 seconds, 160 mm.		
10 " "	155 "	
15 " "	148 " 39 in first	15 sec. 6
20 " "	135 " "	
30 " "	90 " 43 in second	15 " 6
45 " "	70 " 38 in third	15 " 7

The experiment was then interrupted for half an hour, when the low pressure produced by the pigeon's blood had passed off. One grm. of potassium ferrocyanide was then dissolved in 10 cc. of normal salt solution, warmed to 38° C., and then injected into the left jugular vein, and the blood collected from the right jugular, and other details followed, as in the case of the injection of pigeon's blood.

BEFORE INJECTION.

Blood pressure.	Pulse in 15 Seconds.	Respiration. in 15 Seconds.
155	40	7

AFTER INJECTION.

Blood pressure.	Pulse in 15 Seconds.	Respiration. in 15 Seconds.
5 seconds, 110		
10 " 50		
15 " 30	16 in first 15 sec.	1
20 " 20		
30 " 18	6 in second 15 "	none.
	Dead.	

The blood was then allowed to stand in the watch-glasses until the serum separated; a drop of the latter was then drawn off with a pipette, placed on a porcelain dish, acidulated with dilute hydrochloric acid, and tested with a drop of dilute ferric chloride solution. It was then found that the portion of blood collected *fifteen* seconds after the injection of the potassium salt was the first to form the characteristic blue with the iron. The potassium ferrocyanide, therefore, passed from the left jugular vein to the right in *fifteen* seconds; pulse in 15 seconds = 16.

Experiment 2.—Nov. 30, 1883. Dog. Weight 10 kilo. Details of experiment the same as in the preceding. The pigeon's corpuscles were found in 17 seconds; pulse in 17 seconds = 53.

BEFORE INJECTION.

Blood pressure.	Pulse in 15 Seconds.	Respiration. in 15 Seconds.
120	33	5

AFTER INJECTION.

Blood pressure.	Pulse in in 15 Seconds.	Respiration. in 15 Seconds.
5 seconds, 120		
10 " 120		
15 " 120	44 in first 15 sec.	6
20 " 120		
30 " 115	50 in second 15 "	7
60 " 60		

The animal was then allowed to remain undisturbed until the pressure again became normal, when 0.4 grm. potassium ferrocyanide, dissolved in 4 cc. normal salt solution, was injected, and the blood collected as before.

BEFORE INJECTION.

Blood pressure.	Pulse in in 15 Seconds.	Respiration in 15 Seconds.
150	36	6

AFTER INJECTION.

Blood pressure.	Pulse in in 15 Seconds.	Respiration. in 15 Seconds.
5 seconds, 120		
10 " 55		
15 " 25	18 in first 15 sec.	2
30 " 15	15 in second 15 "	none.

Heart stopped one minute after injection.

The serum was then tested as in the previous case, and the Prussian blue found in the blood collected 9½ seconds after the injection of the potassium salt. The heart-beats in this period = 14.

The comparison of the times required in the same animal for the circulation of the pigeon's blood and the potassium salt, clearly proves the falsity of the assumption that the salt moves through the vessels with the same velocity as the blood.

Vierordt (*Stromgeschwindigkeiten des Blutes*, Berlin, 1862), who, by his numerous experiments and important modifications and extensions of the plan of research, has identified himself with Hering's method, from a series of seventeen experiments made on dogs with an average body weight of 9.14 kilo., places the mean time of circulation in the dog at 15.22'', and from experiments made on three rabbits of 1.37 kilo. average weight, he gives 6.91'' as the mean time of circulation. In giving these figures, he states that he has been careful to exclude all experiments in which the violent symptoms produced by the injection of the poison occurred within the time that his other experiments made on the same plan, but in which such symptoms did not appear, give as the mean time of circulation. This is, however, manifestly unwarrantable; for, were the substance injected a solid carried mechanically by the blood, any disturbance of circulation accompanied by great reduction in the pulse and blood pressure could only produce reduced velocity of the circulation, and consequently prolong the time required for the circuit of the injected solid around the blood-vessel system. But that in the face of such disturbance, and that, too, of the most violent character, the salt could be distributed with the greatest rapidity throughout the body, clearly proves that it was not mechanically carried by the blood. Thus, in the experiments detailed above, we find that even when given in doses large enough to arrest the heart almost instantly, thus removing the main cause of the movement of the blood, and greatly

reducing its velocity, we find, nevertheless, that the potash salt circulates more quickly even than the time given by Vierordt, and twenty-five per cent. faster than the pigeon's corpuscles are carried by the blood under normal conditions of pulse and pressure; for it should be noticed that the pulse and pressure remain comparatively undisturbed until after the circulation is complete. That the pigeon's cells are not delayed in their passage through the capillaries is proved by the fact that there is never any rise of blood pressure after making an injection of pigeon's blood, as would occur were there any blocking of the circulation in the capillaries.

The following are the results obtained in ten experiments made in the manner described above, to determine the time required for the passage of the pigeon's corpuscles from one jugular vein to the other. In each case the pulse and pressure remained undisturbed until after the circuit was completed.

No.	Animal.	Time of circulation.	Pulse in time of circulation.	Weight.
1.	Dog.....	20 seconds.	55	18 kilo.
2.	".....	17 "	53	10 "
3.	".....	15 "	50	8 "
4.	".....	15 "	47	8 "
5.	".....	18 "	44	10 "
6.	Pup.....	20 "	60	3 "
Averages		17.5 "	51.5	9.5 kilo.
1.	Rabbit....	14 "	—	3 "
2.	".....	12 "	—	11½ "
3.	".....	9 "	27	2½ "
4.	".....	9 "	35	2½ "
Averages		11	31	2.3 "

It is seen, in the above series of experiments made on dogs with about the same average weight as those experimented on by Vierordt (9.41 kilo., and 9.5 kilo.), that the mean time required by the pigeon's corpuscles for the jugular circuit is 17.5'', as compared with 15.22'' obtained by Vierordt for the potassium salt; while in the rabbit, 11'' was obtained as a mean as compared with 6.9''. Consequently, in the dog nearly 15 per cent. of the time stated by Vierordt as expressing the mean time, and in the rabbit over 59 per cent., are due to diffusion.

In this connection it might be suggested that the rapidity of circulation is greater in small animals than in large, not only on account of the shorter path to be traversed, as insisted upon by Vierordt, but because small animals contain, both absolutely and relatively as to body-weight, a smaller volume of blood; and since it has been shown that diffusion has something to do with the result, the salt will diffuse more rapidly into a small volume of fluid than into a large; therefore, the element of diffusion is more marked in the rabbit than in the dog.

2. *The Value of the Infusion Method in Determining the Mean Time of Circulation.*—It may at the outset be admitted, with Hering and Vierordt, that if the mean velocity of the circulation could be determined for the jugular path, it would probably express the mean time required for the total amount of blood to complete the circuit of the body. For while the portion of the blood which leaves the aorta to pass through the coronary arteries to reach the right auricle follows a shorter path than the blood which passes through the capillaries of the feet or the portal system, the velocity in the large trunks is so extremely high that the difference in time in passing through two large trunks, even of such extremes of length as the carotid at its origin and the metatarsal, is so slight as scarcely to be appreciated. The great part of the time of the circulation is therefore consumed in passing through the capillaries, and the jugular path may be regarded as giving a mean between the two extremes of distance above alluded to. It therefore only remains to determine whether the mean time required for the jugular circuit has been or can be obtained by the infusion method, or by the modification which I have employed.

It has already been shown that the elements of diffusion in this method cannot be neglected, since, even after stoppage of the heart, when the only remaining propelling force acting on the blood is the rapidly decreasing difference in pressure between the arterial and venous systems, the potassium salt is carried around the circuit even in less time than is stated by Vierordt to be the mean normal time of circulation, and in considerably shorter time than is required for the pigeon's corpuscles. But even this time required for the circulation of the pigeon's corpuscles is far above what must be the true mean time. For we know that in all cases of movement of fluids in tubes, the portion of the fluid in the centre of the tube moves with a much higher velocity than the portions in contact with the walls of the tube. It is also known that the red blood corpuscles, from their greater specific gravity, are carried in this central column of greatest velocity, and, *a fortiori*, pigeon's corpuscles, having a greater specific gravity than non-nucleated mammalian cells, will have the maximum velocity of the moving column. Consequently, the time required for the circuit of the pigeon's corpuscles will be much shorter than that required for the mass of the blood.

An experiment of Schklarewsky (Hermann, *Handbuch der Physiologie*, vol. iv., p. 315) suggested

to me a means by which the minimum velocity of the blood could be obtained. He found, when particles of different densities suspended in a fluid were propelled through capillary tubes, that the particles with the greatest density moved with the highest velocity, while the lighter particles moved in the peripheral portions of the stream, where the velocity was the lowest. This fact serves to explain the motion of the red blood cells in the axis stream, while the lighter white blood corpuscles move along the walls of the vessels. If, therefore, a fluid containing suspended particles lighter than the red blood disks, and small enough to pass through the capillaries, is injected into the blood current, it may be assumed that the lighter particles will be thrown out of the more rapidly moving central current into the slower moving excentric layers.

The following experiment seems to indicate that this is actually the case:

About 1 gram of carmine was rubbed up in a mortar with 30 cc. of normal salt solution, poured into a conical glass vessel and allowed to stand for twenty-four hours; by this time all the larger carmine particles had settled to the bottom of the glass, and the upper layers, as proved by microscopic examination, contained only carmine granules, of which the largest were smaller than the mammalian red blood cells. This was determined by placing a drop of the carmine fluid with a drop of blood on a slide under the microscope. Ten cc. of this fluid were then injected into the external jugular vein of a dog, and the time which elapsed before the carmine particles appeared in the blood drawn from the opposite jugular vein was determined in the same manner as was made use of in the experiments with the pigeon's blood.

The following are the details of the experiment:

Experiment 11.—Dog. Weight, 10 kilo.

BEFORE INJECTION.

Pulse in 15 seconds.	Pressure.	Remarks.
35	110	

AFTER INJECTION OF 10 CC. OF CARMINE FLUID.

36 in first 15 seconds.	110	Carmine granules found in
36 in second 15 "	115	blood drawn from opposite
37 in third 15 "	118	jugular in 35 seconds after injection. Pulse in 35 seconds=85.

Without laying too much stress on this single experiment, it is at any rate probable that a mean between this extreme and the maximum velocity shown by the pigeon's corpuscles will give the mean time of the circulation. Consequently, I would place the average time required to complete the circulation in a dog of 10 kilo. weight as between 25 and 30 seconds. It will be seen that

this statement can be confirmed by another line of argument.

If the amount of blood driven out of the left ventricle was a constant quantity, the rapidity of the circulation would be in direct ratio to the number of pulsations of that organ. But as we know that the amount of blood thrown out of the heart at each contraction is subject to great variability, and as I have shown in the paper before alluded to that this amount falls considerably below the estimate of the ventricular capacity made post-mortem, the attempt of Vierordt to formulate a law as to a definite relation between the duration of the circulation and the number of ventricular systoles which would agree with the numbers obtained by him as expressing the time of the circulation, is not warranted by the facts in the case.

Thus, Vierordt stated that in all species of animals the time required for the completion of the circulation was the time required by the heart for making *twenty-seven* pulsations; consequently, each ventricular contraction must discharge $\frac{1}{27}$ of the entire bulk of blood in the body.

Now, according to the calculations of Heidenhain, which are generally accepted as correct, the average amount of blood in a dog is $\frac{1}{8}$ of his body's weight. A dog weighing 10 kilo. will, therefore, contain 769 grams of blood; or as the specific gravity of the blood is about 1050, 730 cc. of blood. To propel this volume of blood once around the body in twenty-seven pulsations of the heart, at each contraction the ventricle must discharge 27 cc. of blood, a quantity which is about double the amount which the ventricle of a dog weighing 10 kilo. can be made to contain.

There can be no doubt, however, though the statements of Vierordt in this connection are incorrect, that there must be a definite relation between the number of heart-beats and the time of circulation; for the application of the same line of argument to the data I have obtained gives a result which almost absolutely coincides with the figures obtained by direct measurement. In a dog weighing about 10 kilo., about 12 cc. would be thrown out of the ventricle at each contraction under normal respiration; and as the amount of blood in the body would in a dog of this size be 730 cc., sixty pulsations of the heart would be required to drive the entire amount once around the body. Placing the pulse-rate at 120 in the minute, the circulation would be completed in 30 seconds, a number which is identical with the figures given above.

It also appears that the number thus obtained

by deduction as giving the number of heart-beats to complete the mean circulation is nearly in accordance with the number of pulsations required for the circulation of the pigeon's corpuscle; for if 50 pulsations are required for the maximum velocity and 85 for the minimum, the mean between these, 67, is near enough to the figure obtained by deduction to show that the method is nearly absolutely correct.

While there can be no doubt that an abnormal increase in the rate of the pulse, by diminishing the amount of blood thrown out of the ventricle, will lengthen the time required by the blood to complete the circuit of the body, it cannot be urged that in my series of experiments the pulse was sufficiently accelerated by the ether to cause any retardation of the circulation. For in experiment 1, where the effect of the ether had passed off before the estimate was made, the time of circulation was even longer than in cases in which the narcosis was more profound.

There is one other point in which my experiments fail to confirm the results obtained by Vierordt. Although I cannot find in his paper before referred to any experiments to substantiate the assertion, he makes the statement (*Grundriss der Physiologie des Menschen*, 5te Auflage, 1877, S. 162) that moderate stimulation of the vagi lengthens the time of circulation by reducing the number of pulsations of the heart, but that nevertheless 26 contractions are here also required to complete the circuit; from which he makes the deduction that moderate irritation of the vagus reduces the number of the heart's contractions without modifying the amount of blood thrown out at each systole.

Of course, since I have not seen the details of the experiments on which these conclusions are based, it is impossible to form any opinion as to what is meant by "moderate" stimulation of the vagus.

As far as I know, no measurements of the quantity of blood thrown out from the heart during vagus irritation have ever been made, though a diminution of pulse-rate by cold has been found by Howell and Donaldson (*Proc. Roy. Soc.*, No. 226, 1883,) to augment the quantity of blood discharged at each systole. And if the irritation was not sufficiently severe to cause much reduction in blood-pressure or velocity, it is conceivable that the pulse might be considerably reduced in frequency, but that the reduction would be balanced by the larger volume of blood discharged at each contraction. The only difference, therefore, in the phenomena of circulation during

vagus irritation from the normal condition, would be that fewer heart-beats would be required to complete the circulation. The following experiments show this to be the case:

Experiment 12.—December 18, 1883. Dog. Weight, 11 kilo. Pigeon's blood injected, and time of circulation estimated as before. Irritation of vagus with induction current commenced at moment of injection.

BEFORE INJECTION.

Pressure.	Pulse in 15 seconds.	Respiration.	Remarks.
180 mm.	37	5	

AFTER INJECTION AND VAGUS IRRITATION.

140 mm.	16 in first 15 seconds.	Vagus irritated 31	
150 "	20 in second 15 "	seconds. Corpuscle found in 19	
140 "	32 in third 15 "	seconds. Pulse in 19	
120 "	48 in fourth 15 "	seconds = 21; normal pulse in 19 seconds = 50.	

Experiment 13.—December 20, 1883. Dog. Weight, 14 kilo. Conditions of experiment the same as in preceding.

BEFORE INJECTION.

Pressure.	Pulse in 15 seconds.	Respiration.	Remarks.
160	35	7	

AFTER INJECTION AND IRRITATION.

140	18 in first 15 seconds.	Vagus irritated 44 seconds.	
160	24 in second 15 "	Corpuscle found in 14	
130	30 in third 15 "	seconds. Pulse in 14 seconds = 17. Normal pulse in 15 seconds = 35.	
90	47 in fourth 15 "		

HOSPITAL REPORTS.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Pneumonia.

The patient is a native of Canada, 29 years of age, married, and a porter by occupation. Was admitted to the hospital last evening. There is no family history bearing on his present illness. He has never had syphilis, rheumatism, or malarial fever. Is temperate in the use of alcoholic liquors. He was in good health until a week ago last Tuesday, when he took cold, and suffered from soreness and a sense of oppression in the left side of his chest. He went about, however, until last Friday, December 23d, when he had a severe chill, after which he felt very ill. Then he had a cough which was accompanied by a glairy, viscid, mucous expectoration, and continued soreness over the left chest and shortness of breath. Since then he has had ardor-urinae, and he passes his water frequently and in small quantities. He suffers constantly from anorexia, and he has pain and tenderness extending all over the left chest and about the epigastric region and radiating towards the left groin. He went to a physi-

cian outside, who applied a mustard poultice over the lower part of the chest, and told him to wear an oil-silk jacket, and he said that he had either a pleurisy or a pneumonia. On his admission the dyspnoea, pain, and cough were very intense; and his pulse was 118, respiration 24, and temperature 103.6. His urine contained no albumen or casts.

Inspection.—There is marked dyspnoea and a loose cough. The shoulders and back are covered with a profuse acne eruption, which was produced by the oil-silk jacket. The face is flushed and dark.

Palpation.—The movements of expansion and elevation of the chest are lessened upon the left side, and the vocal fremitus is a little more marked. There is great sensitiveness of the skin, and tenderness upon pressure over the whole of the left side.

Percussion.—Over the left chest anteriorly dullness extends from the fifth rib downwards to the base of the lung. It extends a little higher up in the axillary region, and posteriorly it covers the whole area of the left chest below the spine of the scapula. Pulmonary resonance is normal on the right.

Auscultation.—Broncho-vesicular respiration and bronchophony are heard over the whole of the left chest. The first sound of the heart is feeble.

The history of this case, gentlemen, is not a perfectly clear history of a pneumonia beginning at the time of his first illness, but it is similar to another case you saw here a short time ago, where there had been a previous illness before the acute attack. This man was first taken ill two weeks ago with a cough and a sense of soreness and oppression in the left chest; but he kept about until last Friday, coughing and complaining of malaise. Then he had a chill, which was followed by a sharp pain in the side, referred to the region of the umbilicus, and a difficulty in breathing. He went to a doctor, who told him to wear an oil-silk jacket; and he applied a blister to his chest and told him that he had either pleurisy or pneumonia. And the history since then has been the history of a pleurisy or of an acute pneumonia. Last evening, upon his admission, he was in great distress from oedema of the lungs which demanded immediate attention. After he was relieved by treatment, a physical examination was made, and the same signs were found as we have obtained to-day. These are signs of consolidation of the lung, but modified in such a way as to give one a suspicion that they may be due to a pleurisy. Over all the region of dullness there was obtained, not a distinct bronchial respiration, such as is heard in pneumonic consolidation, but rather a distant broncho-vesicular murmur with bronchial voice. But neither the respiratory nor the voice sounds were so distinct as in complete consolidation of the lung. It was thought, therefore, that there might be fluid in the pleural cavity, and so a hypodermic needle was inserted to determine this; but no fluid was found. Hence I conclude that the physical signs denote the existence of a circumscribed limited pulmonary consolidation, rather than a pleurisy, with effusion confined to circumscribed limits. We sometimes see cases of pleurisy where the effusion is confined within certain limits by

the formation of fibrous adhesions between the costal walls and the pleura of the lung, and thus we get a circumscribed pleuritic effusion of serum, or it may be a pleuritic abscess. And the reason that it was thought that this might be a case of pleurisy, with a circumscribed effusion, was because of the absence of the usual auscultatory signs found in cases of pneumonic consolidation. But of course the failure to find any fluid is the crucial test.

This is evidently not a case of ordinary croupous pneumonia, but in its origin and history it is very similar to a case which you saw in another ward some time ago, where there was a period of preceding symptoms just as there was here. These were symptoms of a bronchitis which was neglected, and so ran on into a catarrhal pneumonia, which ran a limited course and terminated on the eighth or ninth day, and which was severe in degree. This man since he came in has had a temperature of nearly 104°, and to-day at 12 o'clock it was 103.8°, but it has now fallen to 103.2°, with a pulse of 120, and respirations 24. The expectoration is rather that of a bronchitis than a pneumonia. And in fact the consolidation of the lung tissue here is not as absolute as in croupous pneumonia, but it is a condensation produced by a partial filling of the air cells.

Since this man came in he has been a good deal oppressed for breath, and his breathing is labored and his face becomes red, and I doubt not he suffers constantly from that most distressing sensation, a want of breath. The reason of this is that the breathing space is much impaired, and he probably does very little breathing with the left lung, but most of it with the right. The cough and respiration are such as indicate a pretty intense congestion, giving rise, I have no doubt, to an oedematous condition, perhaps of both lungs. His pulse is good, not strong, but regular, compressible, and rather feeble; and the first sound of the heart is feeble. Now, when you take into consideration the character of his breathing and of his pulse, it is evident that these symptoms demand special attention. The heart needs to be stimulated in order to help it to overcome the pulmonary obstruction. So he is now being stimulated with alcohol and digitalis, and he has been taking one ounce of whiskey and ten drops of the tincture of digitalis every two hours, and he has also been cupped over the chest, so his breathing is now a great deal better than it was. His mind is perfectly clear, and his brain seems to be well nourished, and there is no delirium, and on the whole he is doing very well. But the case demands very strict and watchful attention, for if such cases are watched with great care and attention you will frequently save life. They are not cases to purge and bleed, and to treat upon the old antiphlogistic plan. You cannot shorten the duration of the disease, but you must support the patient, and watch him while he goes through with the regular course of the malady. This has been called "expectant treatment," but in the strict sense of the word it is not truly such; for you are not waiting for the disease to cure itself, but you are watching for such emergencies as demand the attention of the doctor, and these are almost always of the nature of embarrassment from a feeble circulation. A good deal can be

done for his relief by cupping; and repeated successive dry cuppings, with alcohol and digitalis, and with opium, if there is much restlessness, pain, and discomfort, will constitute the armament which you are to use in guiding the patient safely through.

There is one point in the history which is suggestive. He refers his pain to the region of the umbilicus. Many cases of pleurisy have been mistaken for colic because of this location of the pain. It is not at all uncommon when a pleurisy is in the lower portion of the chest, to refer the pain to some point in the upper abdominal region, or even lower than the umbilicus; and so it may be sometimes mistaken for a peritonitis, as well as a colic. There is one other error which is sometimes made in the diagnosis of a pneumonia, though not in adults as a rule. But it not infrequently happens in children that a pneumonia is mistaken for inflammation of the brain. In children of from three to ten years of age, an attack of pneumonia is often ushered in with convulsions, delirium, and cerebro-spinal symptoms, and therefore your attention is likely to be drawn entirely away from the chest. You should remember this fact, and be on the lookout when you find these symptoms in a child. He may not complain of any pain in the chest, and he may not have any cough, but there will merely be cerebro-spinal excitement to show the onset of the disease.

This patient is now complaining of the insomnia of fever, which is sometimes very distressing, or perhaps it is here more the insomnia which not infrequently accompanies those conditions which necessitate constant attention to the breathing, which, if not automatic, requires a great deal of attention. This occurs in cardiac dyspnoea and in pneumonia, when the patient is "almost dead for sleep" as they often express it; but as soon as they fall into a doze they are aroused immediately from lack of breath; and they have to keep on the alert all the time, so that they can not lose consciousness long enough to procure any refreshing sleep. It will not do here to give a very large dose of opium, which would diminish the sensibility of the respiratory centres; but the wisest plan is to stimulate the heart, and at the same time to give moderate doses of opium. Digitalis is a very valuable remedy for this dyspnoea, because it allays the irritability of the respiratory centre, and supplies it more thoroughly with blood. And opium combined with digitalis will produce better effects than opium alone.

In connection with this case I would like to make some remarks upon the subject of feeding in acute diseases. With this man nausea has been a troublesome symptom, and so he has been able to take food in small quantities only.

In many cases of pneumonia this embarrassment does not exist, and in many other cases of acute illness it does not. Now, while I believe that in some instances patients suffering from acute diseases may suffer for the want of food, yet I believe that in many more instances they are forced to take food unnecessarily. The tendency in the last twenty-five years has been to feed and stimulate very largely, and I think that food has been too much crowded oftentimes, and that injudicious feeding is not rare in the management of acute diseases. You probably all know pretty

well from personal experience how the stomach rebels against food if you are not feeling well, and how hard it sometimes is to persuade yourself to eat. Now, while I do not believe it is safe to yield absolutely to this objection to food, yet I do think it is dangerous to push the food too far, and to make a patient take it if he does not want to, beyond a certain point. It has recently been demonstrated pretty clearly that a man in perfect health can starve himself for a good while without suffering any injury; and I do not believe that a little judicious starving in acute diseases is injurious, and at all events it is better than crowding the food. The proper method is to give food in small quantities, and at not too short intervals; and it should be of the most nutritious quality, and given without consulting the taste or the whims of the patient. The majority of cases should be fed with milk, and the preparations of meat, and animal broths; and they should take no solid food, or but very little. There is a great tendency nowadays to feed these patients with farinaceous foods, and gruel, and upon what is called a sick diet; and this is very mischievous, because it gives rise to a fermentative dyspepsia, which is an additional source of suffering, and oftentimes it becomes a serious complication. Gruel, farinaceous substances, and sweets should be carefully avoided; and the strictest directions should always be given as to the kind, quality and quantity of food, as well as of the medicine. And the patient should be allowed no latitude, but should be made to take the food just as it is ordered. And I think there is no more important function, on the part of a doctor, than to insist with the most absolute strictness upon the kind, quality, and amount of food to be given to a sick person. And you will often find that a great deal of mischief has been done in your absence, from a failure to impress upon the attendants the importance of the food.

Patients, as a rule, are no longer treated in private practice as they used to be, but hospital methods and discipline are finding their way into the homes of the sick, as they should. The management of the patient was formerly left to the nurse and attendants, and the doctor had nothing to say about it. But now it is his place to give directions as to the care of the patient, and he should see to it that the food is not crowded. He should always consider the general condition of the patient when in health, and his age, digestive powers, and habits, and bear in mind that there is more danger of overcrowding the food than of not giving enough.

MEDICAL SOCIETIES.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

(Continued from page 686.)

It has already been stated in this memoir that cerebral meningeal syphilis may coexist with various forms of insanity, and cases have been cited in proof thereof. It is, of course, very probable that in some of such cases there has been that double lesion of membrane and gray brain-matter which has just been demonstrated by report of autopsies; further, if we find that there is a

syphilitic insanity, which exists without evidences of meningeal syphilis, and is capable of being cured by anti-specific treatment, such insanity must be considered as representing the disease of the gray matter of the brain. Medical literature is so gigantic that it is impossible to

exhaust it, but the following list of cases is amply sufficient to prove the point at issue, namely, that there is a syphilitic insanity, which exists without obvious meningeal disease, and is capable of being cured by anti-syphilitic treatment:

No.	REPORTER AND JOURNAL.	SYMPTOMS.	RESULTS. REMARKS.
1	Louis Streissand Die Lues als Ursache der Dementia. Inaug. Diss. Berlin, 1878.	Epilepsy, delirium of exaltation, alteration of speech, headache, failure of memory.	Rapid cure with mercury.
2	Ibid	Delusions, delirium, general mania, great muscular weakness.	Cure with mercury.
3	Dr. Müller, of Leutkirch Journal of Mental Dis., 1873-4, 561.	Symptoms resembling general paralysis, and diagnosis of such made until a sternal node was discovered.	Cure by iodide of potassium.
4	Fr. Esmarch and W. Jersen . . . Allgem. Zeitschrift f. Psychiatrie.	Sleeplessness, great excitement, restlessness, great activity, incoherence and violence.	Cure by mercury.
5	M. Leidesdorf Medizin. Jahrbücher, xx. '64, 1.	Complete mania, played with his excitement, and entirely irrational.	Complete cure by iodide of potassium.
6	Dr. Beauregard Gaz. Hebdom. de Sci. Med. de Bordeaux, 1880, p. 64.	Symptoms resembling those of general paralysis.	Cure by iodide of potassium.
7	M. Rendu Ibid.	Loss of memory, headache, irregularity of pupils, ambitious delirium, periods of excitement, others of depression, embarrassment of speech, access of furious delirium ending in stupor.	Mercurial treatment, cure.
8	ibid	Hypochondria, irregularity of pupils, headache, failure of memory, melancholy, stupor.	Mercurial treatment, cure.
9	Dr. Albrecht Erlenmyer Dei luëteschen Psychosen, Nuewied, 1877.	Melancholia with hypochondriasis, sleeplessness, fear of men, and belief they were all leagued against him.	Iodide of potassium, cure.
10	Ibid	Religious melancholia, with two attempts at suicide, ending in mania.	Iodide of potassium, cure.
11	Ibid	At times very violent, yelling, shrieking, destroying everything she could get hands on, at times erotomania; no distinct history of infection, but her habits known to be bad, and had bone ozœna and other physical syphilitic signs.	Iodide of potassium, cure.
12	Ibid	Epileptic attack followed by a long soporose condition, ending in mental confusion, he not knowing his nearest friends, etc., almost dementia.	Cured by mercurial inunction.
13	Ibid	Great fear of gendarmes, etc., mania, with hallucinations, loud crying, yelling, etc., then convulsion, followed by great difficulty of speech.	Cured by mercurial inunctions with iodide internally; subsequently return of convulsions, followed by hemiplegia and death.
14	Ibid	Great unnatural vivacity and loquacity, wanted to buy everything, bragged of enormous gains at play, etc.; some trouble of speech.	Iodide of potassium cure. Attended to business and seems as well as before. Relapsed. (See Symptoms.)

NO.	REPORTER AND JOURNAL.	SYMPTOMS.	RESULTS. REMARKS.
	Ibid Relapse of case 14.	Fifteen months after discharge from asylum, relapse; symptoms developing very rapidly, delirium of grandeur of the most aggravated type with marked progressive dementia, failure of power of speech, and finally of locomotion.	Failure of various anti-specific treatment.
15	Dr. A. Erlenmeyer Die luëteschen, etc.	Failure of mental powers, inequality of pupils, trembling of lip when speaking, uncertainty of gait, almost entire loss of memory, once temporary ptosis and strabismus.	Iodide of potassium in ascending doses failed. Recovery under mercurial inunctions.
16	Ibid	Failure of mental powers, pronounced delirium of grandeur, hallucinations of hearing, failure of memory, strabismus and ptosis coming on late.	Iodide of potassium, corrosive sublimate injections. Cure.
17	Ibid	Failure of memory and mental powers, slight ideas of grandeur, disturbance of sensibility and motility, aphasia coming on late.	Cure with use of iodide and mercurial inunctions.
18	Ibid	Melancholy, great excitability, ideas of grandeur, after a long time sudden ptosis and strabismus.	Iodide of potassium failed; mercurial course improved; joint use cured patient.
19	Ibid	Various cerebral nerve palsies, great relief by use of mercurial inunctions, then development of great excitement, delirium of grandeur, failure of memory and mental powers, and finally death from apoplexy; no autopsy.	
2	Dr. J. B. Chapin. Amer. Journ. Insanity, vol. xv. p. 249.	Melancholia with attempted suicide, epilepsy, somnolent spells.	Iodide of potassium, cure.
21	Ibid	Acute mania, noisy, very destructive; syphilitic disease of tibia.	Iodide of potassium, cure.
22	Dr. Snell	Maniacal excitement.	Cured by specific treatment.
23	Wm. Smith Brit. Med. Journ., July, 1868, p. 30.	Apathetic melancholy, indelicate, speaking only in monosyllables, and much of the time not at all, sullen and menacing.	Rapidly cured by conjoint use of iodide and mercurial. The symptoms first developed 3 months after chancre.

A study of the brief analyses of symptoms just given shows that syphilitic disease of the brain may cause any form of mania, but that the symptoms, however various they may be at first, end almost always in dementia, unless relieved.

Of all the forms of insanity, general paralysis is most closely and frequently simulated by specific brain disease. The exact relation of the diathesis to true, incurable, general paralysis, it is very difficult to determine. It seems well established that amongst persons suffering from this disorder, the proportion of syphilitics is not only much larger than normal, but also much larger than in other forms of insanity. Thus Dr. E. Mendel (*Progres. Paral. der Irren*, Berlin, 1880,) found that in one hundred and forty-six cases of general paralysis, one hundred and nine, or 75 per cent., had a distinct history of syphilis, whilst in one hundred and one cases of various

other forms of primary insanity only 18 per cent. had specific antecedents.

Various opinions might be cited as to the nature of this relation between the two disorders, but for want of space the curious reader is referred to the work just quoted, and to the thesis of C. Chauvet (*Influence de la Syph. sur les Malad. du Syst. nerveux*, Paris, 1880,) for an epitome of the most important recorded opinions.

Those who suffer from syphilis are exposed in much greater proportion than are other persons to the ill effects of intemperance, sexual excesses, poverty, mental agony, and other well-established causes of general paralysis. It may be that in this is sufficient explanation of the frequency of general paralysis in syphilitics, but I incline to the belief that syphilis has some direct effect in producing the disease. However this may be, I think we must recognize as established, the

opinion of Voisin (*Paralyse générale des Aliénés*, 1879.) that there is a syphilitic peri-encephalitis which presents symptoms closely resembling those of general paralysis. Such cases are examples of the pseudo-paralyse générale of Fournier (*La Syphilis du Cerveau*, Paris, 1879).

The question as to the diagnosis of these cases from the true incurable paresis is of course very important, and has been considered at great length by Voisin (*loc. cit.*), Fournier (*loc. cit.*), and Mickle. (*Brit. and For. Medico-Chirurg. Review*, 1877.)

The points which have been relied upon as diagnostic of syphilitic pseudo-general paralysis are:

The occurrence of headache, worse at night and present amongst the prodromes.

An early persistent insomnia, or somnolence; early epileptiform attacks.

The exaltation being less marked, less persistent, and perhaps less associated with general maniacal restlessness and excitement.

The articulation being paralytic rather than paretic.

The absence of tremulousness, especially of the upper lip (Fournier).

The effect of anti-specific remedies.

When the conditions in any case correspond with the characters just paragraphed, or when any of the distinguishing characteristics of brain syphilis, as previously given in this memoir are present, the probability is that the disorder is specific and remediable. But the absence of these marks of specific disease is not proof that the patient is not suffering from syphilis. Headache may be absent in cerebral syphilis, as also may insomnia and somnolence. Epileptiform attacks are not always present in the pseudo-paralysis,

and may be present in the genuine affection; a review of the cases previously tabulated shows that in several of them the megalomania was most pronounced: and a case with very pronounced delirium of grandeur, in which the autopsy revealed unquestionably specific brain lesions may be found in Chauvet's Thesis, p. 31.

I have myself seen symptoms of general paralysis occurring in persons with a specific history, in which, of these so-called diagnostic differences, the therapeutic test was the only one that revealed the true nature of the disorder. In these persons a primary, immediate diagnosis was simply impossible.

Case fourteen of our table is exceedingly interesting, because it seems to represent as successively occurring in one individual both pseudo- and true general paralysis. The symptoms of general paralysis in a syphilitic subject disappeared under the use of mercury, to return some months afterwards with increased violence, and with a new obstinacy that resisted with complete success anti-syphilitic treatment. Such a case is some evidence that syphilis has the power to produce true general paralysis.

In conclusion, I may state that it must be considered as at present proven that syphilis may produce a disorder whose symptoms and lesions do not differ from those of general paralysis; that true general paralysis is very frequent in the syphilitic; that the only perceptible difference is one of curability; that the curable sclerosis may change into or be followed by the incurable form of the disease. Whether under these circumstances it is philosophic to consider the so-called pseudo-general paralysis and general paralysis as essentially distinct affections, each physician can well judge for himself.

EDITORIAL DEPARTMENT.

PERISCOPE.

Thermo-Tracheotomy.

In the *Lancet*, May 10, 1884, Dr. Frank Marsh thus writes:

Few operations are easier of performance on the dead body than that of tracheotomy, and oftentimes few are so difficult upon the living, and therefore the following remarks on the use of Paquelin's thermo-cautery for that purpose may not prove uninteresting. Although of late highly recommended and frequently performed by leading Continental surgeons, notably by Poinot, Boeckel, and Krishaber, no record of this operation has appeared, to my knowledge, in recent medical literature in England. At first sight it would seem to possess great advantages over the usual method with the scalpel, the bloodlessness of the whole proceeding proving attractive, especially to the timid operator. In a certain proportion of cases, I might even say a large proportion, the use of the cautery is obviously inadmissible, time not being given for its preparation, even

were it at hand, as in spasm of the glottis from whatever cause, acute obstruction from lodgment of foreign body, acute oedema, and all those cases in which the patient is at the last gasp before the surgeon is summoned. Unfortunately, in not a few of these instances one is frequently too late even with the knife. It is also unsuitable for those cases where tracheotomy is performed for the purpose of extracting a foreign body in the air-passages, the immediate union of the wound afterwards being a desideratum if the attempt has proved successful. On the other hand, it would seem to be especially indicated in cases of diphtheria, or in syphilitic affections of the larynx, where, as a rule, the process of asphyxia is slow, and where the eschar to a great extent would prevent the infective process spreading to the wound. The disadvantages peculiar to this operation are: the hard and hot eschar on the surface of the wound, preventing the finger being used as a guide during the process of the operation; the inflammatory action in the parts around during the separation of this eschar; the increased liability to secondary hemorrhage from implication of

arteries in the sloughing process; the large wound consequently formed; and the subsequent trouble from cicatricial contraction. All these drawbacks, with the exception of the last, are well illustrated in the following case:

Ada P—, aged six, suffering from diphtheria, was admitted into the detached infectious wards on the 10th of October last (under the care of Dr. Reid), with a view to tracheotomy being performed.

On admission there was great dyspnoea, very little air entering the chest. This increased so much the next few hours that immediate tracheotomy afforded the only hope, and I decided to give the cautery a trial. The disease being extensive, it was desirable to perform the operation as low down as practicable. The child had a short and fat neck, and the thyroid veins were much engorged, owing to the partial asphyxia, material obstacles to begin with. Using a knife-shaped point, with a series of light touches (following Krishaber), keeping strictly in mid-line, and pressing forward the trachea as much as possible with the finger and thumb of the left hand on either side, the latter was at length reached a good inch from the surface, the whole proceeding being perfectly bloodless, and, so far as that was concerned, eminently satisfactory. It was almost impossible to tell the position of the trachea in the wound by tactile examination during the process, and difficult to recognize it by sight among the seared parts; the increased resistance and tendency of the cautery to roll off into the loose areolar tissue around being the chief indications it was reached. This tendency proving an obstacle to opening it, a scalpel was used for the purpose, and with some little difficulty, on account of the depth of the trachea from the surface, a bivalve cannula was introduced, over which a shield of wire, covered with two layers of gauze, was fixed, and, being occasionally moistened with oil of eucalyptus, kept the inspired air both aseptic and free from particles of dust, etc. The child immediately experienced great relief, and on the following day seemed much better, but on the third and fourth days the parts around were much swollen and inflamed, a source of much discomfort to the child. On the morning of the fifth day a severe attack of secondary hemorrhage occurred, evidently from the right inferior thyroid artery becoming implicated in the sloughing process attendant on the separation of the eschar. This was stopped by pressure of lint soaked in strong tincture of perchloride of iron, but not before a good quantity of blood had passed down into the bronchi, the cannula having been removed by the nurse at the onset of the bleeding. This caused severe dyspnoea, the child being unable to expel the blood, and in spite of remedies death took place in about two hours afterwards.

This case, I think, fairly shows the difficulties and drawbacks to this method. With the knife there would undoubtedly have been a great amount of venous bleeding, but it would soon have ceased upon the re-establishment of free respiration; also the position of the trachea could have been defined during the operation, a matter of some import when deeply seated; neither do I think that secondary hemorrhage would have occurred. Again, had the child lived there would

have been the disfigurement from a large scar, and in all probability trouble would have arisen from the pressure effects consequent on the cicatrization and subsequent contraction of an unnecessarily large wound. This, also, would have been avoided by the use of the scalpel. Now, in an adult with a fairly thin neck there is seldom any venous or capillary hemorrhage of consequence, and on this account, therefore, the cautery would hardly be needed, and it would prove but of little avail in checking bleeding from an artery of any magnitude, should one be met with, as occasionally happens, when, for instance, an additional thyroid artery is present; indeed, it would only increase the difficulty of applying torsion or ligature by the consolidation of the parts around. In adults it might be of some use in keeping the wound free from septic or other infection, the subsequent sloughing process, on account of the greater space, not to be so much feared as in the case of a child. Taking, however, into consideration all the above facts, the balance of evidence appears to me by far in favor of the older method with the scalpel, especially for children; and without detracting from the merit of a most valuable instrument, I would very strongly urge its unsuitability for the performance of tracheotomy.

Beneficial Effects of Convallaria.

After detailing a case in the *Practitioner*, April, 1884, Dr. Frederick T. Roberts says:

My experience of the use of convallaria in cases of cardiac disease has not hitherto been so satisfactory as the reports of the value of the drug had led me to expect (*Practitioner*, xxix., 226, 384); but in the case just described, the good effects resulting from its administration were marked and unmistakable. Practically, it might be summed up as a case of mitral obstructive disease, with irregular and inefficient cardiac action; deficient secretion of urine; moderate dropsy of the legs; and considerable ascites. Whether or not the last-mentioned symptom depended partly on morbid changes in the liver, is doubtful. The obvious results of the administration of the convallaria were:

1. A distinct improvement in the action of the heart, which became more regular and efficient, while the thrill and murmur became more evident.

2. A considerable and progressive increase in the quantity of urine produced.

3. Rapid diminution and ultimate disappearance of the oedema of the legs and the ascites.

The compound jalap powder helped, no doubt, to get rid of the last symptom; but the other effects noted were unquestionably due to the convallaria, and the increase in the quantity of urine must have been an important factor in removing the dropsical accumulation. I have thought it worth while to report this case in support of the value of convallaria in the treatment of cardiac affections, although I do not for a moment believe that it will entirely supersede other drugs. The patient is now practically well, so far as symptoms are concerned, but the signs of the mitral obstructive disease are very distinct.

A Case of Compound Fracture of the Leg, Treated on a New Splint.

In the *Brit. Med. Jour.*, May 10, 1884, Dr. F. T. Paul thus writes:

The following case is reported in illustration of the use of a splint which I am now recommending for the treatment of compound fractures of the leg, and disease of the ankle-joint:

Hugh R., aged 15, a rivetter, was struck by a large iron plate on the outer side of his leg. When seen, the sharp end of the upper fragment of the tibia was protruding two inches out of a wound at the inner side of the leg, in the lower third. Ether was administered, and the wound enlarged, and thoroughly carbolized. The bones were accurately fitted together, and a stout wire passed round them, and tightly twisted. Then, the patient being still under the anæsthetic, the splint was applied in the following manner:

With a strip of lead the contour of the front and back of the sound limb is taken from a few inches above the knee, down the tibia, over the toes, heel, calf, and back to the thigh. A strip of stout hoop-iron ($\frac{3}{8}$ inch by $\frac{1}{2}$ inch) covered with rubber tubing, is then bent to lie easily over the outside of the lead pattern, following all its deviations accurately, so that it may fit without pressing unduly on any part (Fig. 2). When the splint

FIGS. 1 AND 2.

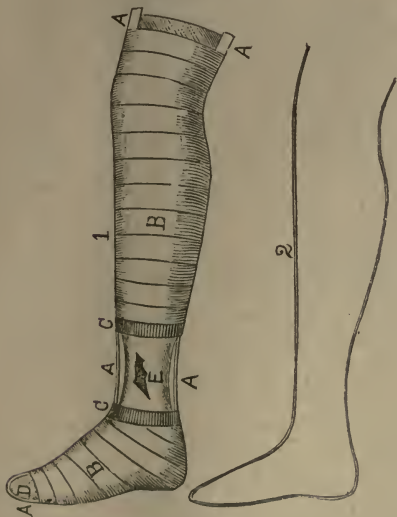


FIG. 1.—From a photograph on the fifth day. (A) The splint. (B) The paraffin bandage. (C) The wax and carbolic oil finish. (D) The antiseptic gauze showing from under the stiff bandage. (E) The fractured limb.

FIG. 2.—The splint of hoop-iron covered with rubber tubing.

is ready (it is of course prepared before the anæsthetic is given), and the bones have been wired, the whole limb is thoroughly carbolized, and the foot and leg well bandaged with antiseptic gauze, leaving a wide interruption at the site of the fracture. Over the gauze a layer of domette bandage, saturated with hot paraffin-wax, is placed, or a plaster of Paris bandage. As soon as the stiff bandage has set, the splint is put on, and more wax or plaster bandages are applied to retain it

firmly in position. Lastly, cotton-wool is packed under the edges of the bandage at the interruption, and brushed over till saturated with Howe's mixture of beeswax and carbolic oil, and the antiseptic dressing is completed (Fig. 1). A very little subsequent care in the dressings will prevent any discharge from getting between the leg and the splint.

The advantages of this mode of treatment are that no deformity of the limb can possibly take place, as the bones are wired and permanently fixed under an anæsthetic; and that the repair is rapid, owing to the absence of movement necessary in the ordinary method of dressing compound fractures. The choice between paraffin and plaster of Paris bandages must depend upon the weight of the limb, and the fixation of the fragment. When the limb is small and the fragments are well fixed, paraffin is quite sufficiently rigid; but under the reverse conditions plaster of Paris should be used, at any rate for some part of the bandage. Paraffin is much the better material in every way, except for its want of sufficient rigidity in the warmth of the bed. In this particular case paraffin was used, and answered admirably. There was a good deal of oozing of blood through the night, but not a drop passed inside the splint. The case was dressed once a day for a week, and then every other day for a fortnight under the spray, when it was stopped, as the wound was healing well. On the eighteenth day the wire was untwisted, and the bones were quite firm. Granulations rapidly appeared in the bare bone at the bottom of the wound, and no necrosis occurred. The highest temperature attained was 100° , and that only on one occasion. On the seventh day the patient was dressed and taken to the Medical Institution in a cab, without the least pain or inconvenience, owing to the perfect support given by the splint; and now, six weeks after a severe compound fracture, he is up on the couch, with the wound almost closed, and the measurements of the leg in every respect normal.

In cases of disease of the ankle-joint with discharging wounds, the splint should be fixed with paraffin, or simply with strapping, leaving all the heel and instep open, and the leg well protected under the splint by a soft or paraffin bandage. If the heel suffer from pressure on the lower bar, the leg and foot should be attached first to the upper bar alone, and then by a bandage round both. The dressings should always be slipped between the heel and the lower bar, or discharge will collect there and decompose.

The splint may be obtained from Messrs. Krohne and Sesemann, in London, and from Mr. Critchley in Liverpool. For hospital use, for compound fracture, it is best ordered in lengths of 5 to 6 feet for adults, to be bent to pattern by the surgeon; but in private practice, and for disease of the ankle, the pattern can be traced on paper from the strip of lead, and the splint ordered about half an inch larger in all dimensions than the limb.

Abscess of the Lung.

Since we are liable at any moment to meet such a case, the following case, which Dr. McKenzie Booth reports in the *Brit. Med. Jour.*, March 8,

1884, will be read with interest as enabling us to detect the trouble: The patient was a girl aged 13, of a markedly phthisical family, who had from time to time suffered from bronchitis. About a fortnight before she was first seen, she had an attack of bronchitis; and, when seen, she was much reduced in strength, and was rapidly losing flesh. Her appetite was entirely lost. She had irregular exacerbations of fever, and severe colliquative sweats, mostly toward nightfall. Temperature 102°; pulse 120 to 140; breathing was very short and hurried; the cough and expectoration were much less than they had been. On percussion, there was slight dullness over the supraspinous fossa behind the right apex; otherwise normal. Auscultation discovered crepitant *râles* over the right apex posteriorly and anteriorly. Almost all food was rejected soon after swallowing; the bowels were much constipated. A purgative was given; sinapisms were applied over the right apex; small doses of opium and digitalis were given every three or four hours. Milk and lime-water, beef-tea, and port-wine, were administered every two or three hours. For the next few days, except that there was less vomiting, the symptoms grew more pronounced. At the end of a week, the temperature was between 103° and 104°, and the pulse could not be counted. About three weeks from the commencement of the bronchitis (eight days after she was first seen), a severe fit of coughing set in, during which pus was expectorated to such an amount as almost to choke the patient. Expectoration continued to be copious for a few days, though gradually diminishing. Percussion-dullness gave way, and for a time the resonance was almost amphoric; whilst gurgling alternated with cavernous breathing. At the end of a fortnight, the cough and expectoration were nearly gone, and the patient was rapidly gaining strength and flesh, although there was still percussion-dullness and broncho-vesicular breathing over the right apex. There was also marked swelling (due seemingly to lymphatic infiltration) over the right side of the neck above the pulmonary apex. After the discharge of the pus, the treatment consisted of carbonate of ammonia, with squills and senega, with free supplies of port-wine and nourishment, and afterwards tonics generally, and preparations of iron; and, under this treatment, the patient recovered speedily.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

A Treatise on Ophthalmology for the General Practitioner. Illustrated. By Adol. Alt, M. D. 1 vol., 8vo., pp. 244. J. H. Chambers & Co., St. Louis.

Though ophthalmology is one of the closest specialties in surgery, it is requisite that the general practitioner should acquire a thorough knowledge of it, so far as it is concerned with the more usual diseases and minor operations. This much

Dr. Alt proposes to give in the volume before us. He treats of diseases of the eyelids, lachrymal apparatus, orbit, conjunctiva, cornea, iris, etc., giving to each a short chapter containing what he thinks most important for his purpose. Necessarily his discussion of many lesions is inadequate to rendering the reader competent to treat them. It could not be otherwise. But this is a universal fault of such compendiums.

There are a reasonable number of illustrations of moderate value which set off the text.

We must express our surprise at the author's statement in his preface that he does not know of any book on ophthalmology, written solely for the general practitioner and his wants. He must have been but little familiar with the literature of his specialty not to have known of several, as, not to speak of others, the excellent manual of Dr. Schell, of this city.

Sexual Neurasthenia: Its Hygiene, Causes, Symptoms, and Treatment, with a chapter on Diet for the Nervous. By George M. Beard, A. M., M. D. Edited by A. D. Rockwell, A. M., M. D. 1 vol., crown 8vo., pp. 270. Price, \$2 00. E. B. Treat, publisher, 757 Broadway, New York.

This work was one of the latest, if not the latest, production of the lamented Dr. Beard. It is strikingly characterized by both the faults and the merits of his style and method. He rarely wrote a dull page, and rarely advocated a sound theory. Adopting early the biological views of the English positivists, he carried them without misgiving to their utmost limit in the discussion of medical questions. It is really curious to see how he accepted without question any result which he thought to follow from his theory of evolution, and strove to make facts support it. In this work, for instance, he defends anthropophagy as the most suitable diet for man.

This volume deals with those cases of nervous exhaustion, which he claimed were due to sexual excess in the male. His descriptions are vivid and his suggestions often valuable; but many of his cases would receive another name from those less exclusively given to theories of nervous diseases.

—Those who would like to see a more than usually learned exposition of the principles of the eclectic school of medicine should read a short pamphlet, entitled "The Scientific Basis of Eclecticism in Medicine," by Dr. C. A. F. Lindorme, of Topeka, Kansas. His statement of the principles is based upon the dynamic relation of drugs to diseases.

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CARELESSNESS OR IGNORANCE?

The French as well as the German Government have each sent a separate scientific commission to Egypt for the purpose of investigating the cholera epidemic there. The French Commission returned home in January, all through with its work, and reported, "that they had detected the real cause of the Asiatic cholera, and that this was to be found in a bacillus," of which they gave description and drawings. The German Commission continued its diligent researches for several weeks longer, and then went to Calcutta, there to make further investigations. Dr. Koch (discoverer of the tubercle bacillus), the President of the German Commission, sent his fifth report home from Calcutta in January. From this report we translate its last part, as the report of the French Commission regarding its discovery of the pathogenic cause of cholera has given rise to a great deal of dispute. Dr. Koch writes:

"From medical journals I have learned that the French Commission sent to investigate the cholera epidemic in Egypt has said in its report that it had arrived at conclusions differing from those I respectfully submitted, and that it had discovered in the blood, organisms which it considers to be peculiar of cholera. This makes it appear as if the German Commission had taken the wrong path, and I consider it, therefore, my duty to give your Excellency my views of the French report.

"There are found in varying numbers in the blood of the healthy human being, aside from red and white globules, small, round, pale form-elements, the so-called blood-discs (blutplättchen). In some febrile diseases, as typhus, pneumonia, these discs are greatly augmented in number, and on account of their resemblance they have been frequently taken for bacteria. In the blood of persons suffering from cholera, and in that of cholera corpses they are also mostly augmented, as we have constantly observed in our investigations. Besides, this fact is by no means new, but has been already mentioned by former investigators. So, for instance, D. D. Cunningham in his article, 'Microscopical and Physiological Re-

searches into the Nature of the Agent Producing Cholera,' has already given (1872) a very good drawing of these form-elements in the blood of cholera patients. And as the most approved methods have not enabled us to recognize in this blood any other elements, which had any resemblance to bacteria; and as further the description given by the French Commission exactly corresponds to that of the blood-discs mentioned, I am forced to the conclusion that the French Commission has committed the same error as other investigators before it, and has taken the blood-discs for specific organisms. Any etiological connection between cholera and these blood-discs cannot possibly exist, for these discs, as already mentioned, are met with in the blood of healthy, and also of such persons as suffer from other diseases."

It is less the mistake, for *errare est humanum*, but the fact that the French Commission made so much noise of its discovery, and hinted at its superiority over the German Commission. The French Government will now be sorry that it has not at least sent men who were acquainted with all that is known of the normal and abnormal constituents of the blood, as it is plain that only such men are competent to institute researches of so difficult a kind.

We may add, that Koch succeeded in Calcutta, two months ago, in discovering the real bacillus of cholera; it is met with only in the intestines, and is greatly distinguished from all other microzymes.

HOPE AS A REMEDY AGAINST DISEASE.

Dr. J. Mortimer Granville has been lately rather severely handled by the Medical Press of London, because he wrote a letter on this subject to one of the daily papers. He is criticised as having performed an unethical act in thus advertising himself in an unprofessional manner in a lay journal. This question we will leave to our transatlantic brethren, while we say a few words upon the subject-matter of his letter.

But little touched upon, Hope, as a remedy against disease, is, if wisely and judiciously em-

ployed, one of the most valuable and useful means that the physician can employ. Call it what we may, and reason about it as we please, no man of experience will for an instant question that imagination, the prejudices, the mental condition, the conviction of the patient, in many cases, exerts a most powerful and a most real influence upon the progress and termination of diseased conditions. Has it not happened to every one of our readers (it repeatedly has to us) to discover accidentally, so to speak, a condition of chronic disease, which has evidently been present for years, and yet the patient has maintained fairly good health, and is, at the time of the discovery, in no immediate apparent danger; yet when told that he is afflicted with an incurable disease that may carry him off in a few days, or that he may live for months, immediately wilts, like the sensitive plants when touched, and dies in a day or two?

Again, do we not all know of cases of chronic disease, in persons with a happy, hopeful, contented disposition, disease that we felt sure would soon prove fatal? and yet we see them go on day after day and year after year enjoying apparently good health. Of course we are familiar with and thoroughly recognize the fact that worry, that mental anxiety, is diametrically opposed to good health and long life; and in this fact we recognize the explanation of the influence of depressing opinions and advice; for if we tell a man with a nervous temperament that he *may* die in a few days, from that moment all peace and contentment vanishes from his life, while anxiety, worry, and unrest takes possession of his whole being.

The practical point to be deduced from these reflections is that it will redound not only to your patient's advantage, but also to your own professional reputation, to make it a rule always to take the most hopeful view that is possible of the patient's condition, especially when the man or woman is one of the "nervous, worrying kind," and always to remember that "hope kept alive" is the great secret of success among quacks. Let us steal their thunder.

THE RESPONSIBILITY OF OBSTETRICIANS.

In some papers sent us lately from New Zealand, there is the report of a case of a Dr. Parry, who attended a woman in confinement. Her death ensued suddenly, and was found on post mortem to have been brought about by rupture of the vagina. It was alleged that the rupture was caused by the rough measures of the medical attendant, but there was no conclusive evidence of this submitted.

The physician was indicted for manslaughter, and although the testimony was conflicting and insufficient to a medical mind, he was convicted and sentenced to four months' imprisonment.

The New Zealand Medical Society held a meeting to discuss the subject, when a resolution was passed that the verdict in the case was not warranted by the evidence.

Dr. Parry had not used any instruments, and the society expressed its opinion by a unanimous vote that the highest obstetrical authors unite in saying that ruptures of this nature nearly always depend on diseased conditions of the vaginal tissues. Some have occurred in the most skillful hands; and when they take place without the violent use of instruments, they may be considered proofs of pathological changes in the walls of the organ.

We note this case, as it is one of general and grave importance. It might happen to any one at any time, and that a physician should lose his liberty and reputation from the ignorance of a jury is something that we should be on our guard against. The matter is one which merits a special study by medico-legal writers and obstetricians. We shall be glad to receive and publish any original observations calculated to elucidate this point.

NOTES AND COMMENTS.

The Pyrexia and Cold Bath Treatment of Enteric Fever.

This is the topic of the hour in England, and many papers on the subject are found in our exchanges. In the *Brit. Med. Jour.* for April 12, 1884, we note a paper by Dr. Francis H. Welch, in which he maintains that the pyrexia is less an

exponent of the extent and degree of the gland lesion than of the impressionability and sympathy of the system to the progressing changes; and, upon the whole, it seems that the younger the individual, the more pronounced will be the pyrexia and general symptoms, and the less the possibility of gauging the gland lesion by the temperature records. With reference to the cold bath treatment, he says, "Cooling applications are always grateful to the patients, and beneficial; but immersion in a bath is a process (even when we have all the requisite appliances at hand) which requires a skilled and trained official and attendants to regulate its effects and ward off possible bad results. And, carry it out as carefully as we may, a certain amount of discomfort, physical and mental disturbance cannot be avoided. It is difficult to prevent the patient from exerting himself, and the younger the patient the more the probable disturbance. What has seemed to me the best course to pursue in the application of cold to the skin generally is, in mild and moderate cases, to frequently sponge the body with water feeling "chilly," say every half hour, not wiping it off, and merely covering the surface with a light sheet, or not even that; in the severe cases, to make the applications continuous by a small sheet wrung out in cold water (and made more so, if necessary, by experience) and packed close to the naked body, with a light outer covering, and repeated according to results.

Such a packing is within the scope of an ordinary attendant, can be carried out without inconvenience or movement to the patient, the materials can always be got, and a waterproof covering under the lower sheet will keep the bed dry. Moreover, I believe that it will meet all the requirements of the great majority of cases. Instances, however, will occur in which the body-temperature cannot be reduced by it, and resort may then be had to the bath to meet the pressing danger. Yet even the influence of the bath is limited: and I suppose most have met examples in which repeated immersions have failed to stop the production, or prevent the accumulation, of excessive heat in the frame, the patient succumbing to its effects in spite of all our efforts.

It is hardly necessary to add that movements of air over the body will assist the influence of the cool applications, nor would it be difficult in most rooms to rig up a "punkah" to carry this out more effectually.

A Rapid Case of Acute Cerebro-spinal Meningitis.

The following case, which Dr. Albert Wilson

reports to the *Brit. Med. Jour.*, April 12, 1884, is interesting on account of the extreme rapidity with which it passed through the three stages of cerebral fever (Trousseau) or cerebro-spinal meningitis. Each stage lasted twenty-four hours:

"I was sent for at the commencement of the second stage. The patient, Mr. A., aged nearly eighteen, was in good health on the 21st of February, 1884. On February 22, he complained of headache at the forehead and posteriorly, loss of appetite, pain in the stomach, and constipation. At night, he vomited green fluid, and was restless. This was the first stage. On February 23, at 5 a. m., the parents were awoke by moaning, and found him tossing about in bed, and unable to speak. I saw him at 6 a. m. The patient was semi-conscious, very pale, throwing his arms and legs about, and rubbing his stomach; his eyes were half open, and very watchful of all my movements. The conjunctivæ were sensitive; the pupils dilated. He always pushed my hand away when I touched him, and if offered food, would knock the spoon or cup away. The skin was cool. Pulse 72; the tracing was normal. He was too restless for the thermometer to be used. I ordered twenty grains of bromide of ammonium and ten grains of chloral every two hours till he was quieter. There was nothing to account for the illness except over-study. At 11 a. m., his condition was the same. There was no rigidity of muscles nor epileptic state. Food and medicine had to be forced, the patient resisting his utmost, even trying not to swallow. He moaned constantly, and was worse when his relations approached, and strongly disliked my presence. His watchfulness was very marked, but he could not speak. The last time he spoke was about 1 a. m. At 4 p. m., he passed motions and urine in the bed. He fell out of bed twice. In both cases, he was found in a sitting posture, the head and shoulders resting against the bed. He did not at any time hurt himself or strike against anything hard. At 10 p. m., he had had four doses of bromide of ammonium and chloral, and also two thirty-grain doses of bromide of ammonium, but without any soothing effect. Pulse 72; skin cool. The restlessness and moaning had increased. The patient did not sleep during the night. This ended the second or 'apyretic' (Trousseau) stage. The respiration was not irregular, which is unusual.

"On February 24th, 11 a. m., the third stage commenced. Muscular excitement was diminishing. The thumb was tightly opposed, and the flexed over it. The head and neck were forcibly retracted. The limbs were flexed. The stomach

was retracted. There was no purposive resistance, although he had great difficulty in swallowing, and was very restless. Pulse 100; skin hot and dry. The conjunctivæ were injected; the pupils contracted. He was comatose, moaning constantly. Large quantities of urine were passed involuntarily. At 4 p. m. he was seen in consultation with Dr. Hughlings Jackson. There was much less muscular resistance, and he swallowed quietly. Opisthotonos was increased. Pulse 120. Temperature (axilla) 103.6°. The optic discs were normal. The tendon-reflex was normal. The bromide was continued in thirty-grain doses, with the addition of ten grains of iodide of ammonium. At 10 p. m., coma was deeper. The head was more retracted. He was almost unable to swallow, but since 4 p. m. had had two doses of his medicine. Temperature 104°; pulse 120. He died at 8 a. m. on February 25th.

Dislocation of the Wrist.

Since dislocation of the wrist-joint without fracture of the radius is a very rare accident, the occurrence of which is denied by some surgeons, the following case which Dr. John Cochrane reports in the *Edinburgh Med. Jour.*, May, 1883, possesses peculiar interest. Two boys were running at great speed and a collision was unavoidable, and in order to break the shock his patient had held up his hand and received the impetus on the palmar surface with such violence as to immediately throw the wrist out of joint. The physical signs of dislocation were quite evident, and there was thorough distortion. He placed a splint along the palmar surface and bandaged the hand and arm, and ordered perfect rest. In the evening he saw him again, and he still felt very easy. In the course of the next day, however, considerable swelling of the tendinous sheaths of the muscles of the arm appeared, and there was now considerable pain in that direction. This was evidently due to the amount of stretching, etc., which the muscular structures had undergone.

Under the effects of turpentine stupes, and laudanum locally applied, swelling and pain rapidly subsided, and the patient made a rapid progress towards recovery. The temperature never went very high during this attack of inflammation. For a few days afterwards he wore the arm in a sling. At the date of report he had perfect use of the joint and suffers from no bad effects.

Pneumonia Treated by Cold Baths.

M. Gignoux, of Lyons, has lately published a paper consisting of details of five cases of pneu-

monia. In four of these cases he had resorted to baths, and in one to cold applied by means of compresses of ice-cold water renewed at intervals of five minutes, a bath not being at hand. All were severe cases; four recovered, and one died. The fatal case appeared to derive benefit from the bath, although the pulse was sufficiently feeble from the first to warrant a foreboding of death. The treatment was carried out with much resolution; one patient had thirty-two baths in seven days; another fourteen in three; and in the case which proved fatal they were given regularly every three hours for three or four days. The temperature of the baths ranged from 68° to 75° F. M. Gignoux, from his experience, thinks very highly of the baths; and these cases, although few in number, are carefully reported, and will make a valuable addition to the now accumulating experience of this plan of treatment in pneumonia. The pamphlet is entitled *Observations de Pneumonies traitées par les Bains Froids*.

The Specificity of Gonorrhœa.

In the course of his remarks on gonorrhœa, before the Philadelphia County Medical Society, which we have noticed elsewhere, Dr. White related the following: A patient of his had a mistress, with whom he had lived for many years—in fact, they were practically man and wife. Dr. W. was sure that the woman was true to the man. The man contracted a urethritis, as Dr. White believes, from some innocent muco-purulent discharge from his mistress. He went to his family physician, who told him that he had gonorrhœa; but not believing in its non-specificity or through negligence, failed to impress upon him the fact, which Dr. White seems firmly to believe, that urethritis or gonorrhœa is not necessarily derived from a pre-existing specific disease. The man, therefore, suspecting his 'mistress, abandoned her with harsh words. She, deprived, unjustly as she believed, of the support and love to which she had been accustomed for so many years, became despondent, and within ten days committed suicide.

Resection of the Ribs in Empyema.

As of interest in connection with the paper by Drs. Bruen and White, recently published in our pages, we note that at a recent meeting of the Paris Société de Chirurgie (April 23), M. Hermann, of Mulhouse, read notes of a case of multiple rib resection for an empyema which had existed many years. By means of an I-shaped incision, of which the central line corresponded to

the axilla, he resected long pieces of the third, fourth, fifth, sixth, seventh, and eighth ribs, under strict antiseptic precautions. The result was not satisfactory, repair not taking place, so that ten weeks after the operation there was a large excavation exposing the diaphragm and lung covered by granulations. From this experience, Hermann agrees with Berger that it is well not to operate when the lung is firmly adherent posteriorly. Probably he would have obtained a better result had he contented himself with a less radical measure, or performed the resections at intervals instead of at one operation.

Wood-wool Dressings.

We had occasion some time since to refer to this article as a dressing for wounds, and we now note from the *Lancet*, April 12, 1884, that Mr. Ormsby, of the Meath Hospital, Dublin, has recently been using wood-wool dressing after operations, and speaks highly of it. The following are brief notes of a case in which this method was used: A man aged fifty-three was admitted for disease of the tarsal bones of the left foot, extending for some distance into the lower ends of the tibia and fibula. Amputation was performed a hand's breadth below the knee-joint, ether being administered by the Ormsby inhaler; Carden's method, by oval skin flaps and circular division of the muscles, being the operation adopted. At the second dressing wood-wool was applied. There was a little secondary hemorrhage, which was easily controlled, and the case has progressed favorably.

Fracture of the Patella.

To the New York Surgical Society, at a recent meeting, Dr. F. Lange presented a patient, a man sixty-two years of age, who illustrated the usefulness of a limb after fracture of the patella, in spite of a distance of three inches between the fragments. The patient had had fracture of the patella several times, and the last time the injury occurred three or four years ago, and there was also rupture of the crucial ligaments, as evidenced by hyperextension of the knee-joint and great lateral mobility. The plan of treatment which Dr. Lange adopted was similar to that recommended by Dr. Little, and the immediate result was very good; but after a time the gap between the fragments began to increase and afterward became quite extensive, and measured three inches; and yet the patient was able to walk quite well, could go up and down stairs, and could exercise the limb very well.

CORRESPONDENCE.

Hobby Riders.

EDS. MED. AND SURG. REPORTER:—

Your very excellent journal has contained nothing so refreshing in a long time as was the article by Dr. Mitchell in the issue of May 3. I wish that every young man in the profession could read that article. It is not alone brim-full of solid facts, but they are couched in terms so plain and have such a convincing way with them that the article cannot fail to do good. It, indeed, was high time that some one should stand out and cry "halt" to the rushing mob who are willing to follow the leader who has the loudest voice. I am glad to see that the attempted revival of an antiquated and barbarous treatment for pneumonia has received a good and sudden set-back at the hands of a medical man who can show experience as well as philosophy for his position.

At the time of their appearance, I read Dr. Corson's articles. The venerable doctor's plea for general depletion seemed to me to be not only a lame one, but also one that modern pathology could not explain. But here is a man who has practiced many, many years. He has cured many cases of pneumonia. He bled regularly. If I were to object to this treatment and give all of the very many indisputable reasons why such treatment is both unnecessary and unreasonable, he would silence me by one question: "How long have you practiced medicine?" Are the long years of constant study and observation to be overthrown by the theories of striplings? Well, that depends.

At a glance, the errors these older members of the profession sometimes make do not seem to stand out in the bold relief they really do, owing to the fact that a large class of the profession are ever on the alert for footsteps to follow. It is all very well for our professional teachers to admonish students to "hew to the line," and all that. It is an undeniable fact that a great majority of them are followers—not leaders. They are content to accept the "say-so" of others, and have no itching desire to be other than routine practitioners. This is the class to whom just such articles as Dr. Corson's do inestimable harm. That the lancet is often of value in the treatment of disease, no one doubts. But the attaching of undue importance to its use in any particular disease is where the error creeps in. I am acquainted with two very estimable physicians, one of whom gives quinine for everything almost, while the other very seldom gives it. These preferences and prejudices are in a mild way hard to guard against; but when let run riot, they work great evil for those who are not able to shield themselves from constant bias. This hobby-riding is carried to a lamentable extreme in many of our medical schools. I well remember how two professors in one of your city's colleges spent much valuable time one winter, in '76, over "bleeding in puerperal convulsions." The discussion did not amount to anything. The favorites of each believed all that one said, and nothing that the other said. In the heat of the discussion, many of the students failed to see that both men were

right, and both wrong. To take blood from every patient having puerperal convulsions would be as poor practice as to bleed every case of pneumonia. Some of both should be bled; and to tell which to bleed and which not to bleed, requires the knowledge and judgment which alone distinguish the progressive, active, live physician from the hum-drum doctor.

If all medical men did their own thinking, such articles as Dr. Corson's could not fail to do good, since the mere mention of such extreme views by a man of years and experience would set men to thinking on the subject. Since there is no top round to the ladder, many, too many, members of our profession are content to climb only so far as is necessary, and there stop. These are the men to whom these hobbies do great damage. Struck by the beauty of diction, they lose sight of the main question, and follow the writer or speaker, never once questioning his utterances or weighing his deductions. These are the men who fill the medical journals of the land with miraculous cures. Their stereotyped form runs like this: "Was called to see W. M., 8 years old; had fever, dry cough, etc., etc. Diagnosed membranous croup. Gave syrup of squills 20 drops and sulphate of copper 2 grains every hour. Case recovered in two days." Intelligent men who know anything about the disease, know that such cures are stuff. And yet twenty years hence that same reporter will regale us with just such thin facts.

Homœopathy doubtless had its origin in the abuse of good medicines by old-school physicians. It is not so very long ago that to be attended by an old-school doctor meant bleeding, salivation, and hypercatharsis, no matter what the disease was. Is it any wonder that a new line of practice sprung out of such horrible torture? A leech and suffering people were willing to embrace anything that promised immunity from treatment little less severe than the disease. Any relief, even one teeming with the sophistry of a Hahnemann, might be embraced.

Magazine writers and the professors in our too-numerous medical schools should exercise the wisdom and judgment in their utterances that many of them fail to do. A distinguished member of the profession in Iowa, and the head of one of our schools, said to his class: "When in doubt, give the iodide of potassium." Can a sane man imagine a more senseless bit of advice? When in doubt, get thee to a library! Young men who quit the plow and workshop, with little preparatory learning, to enter the great band of unwarded doctors, swallow such utterances *in toto*.

The remedy for all this must come from within—careful study to learn what is true—and by keeping a sharp lookout for what is false. A determination not to be hobby-riders will make many of our writers and teachers much more useful and much less dangerous members of the profession, while the stigma that attaches to cranks will not so frequently be justly attached to us as a hard-worked, poorly-paid council. J. A. DE ARMOND, M. D.

Le Claire, Iowa.

Again—Conception without Intromission.

EDS. MED. AND SURG. REPORTER:

The REPORTER having in the issue of March 11,

1884, noticed the discussion by Risoni concerning the manner and method of conception, two physicians have since reported in its columns cases clear and sure, of conception without intromission, to which list I now make my addition.

An unmarried lady of 21 years of age applied to me for relief of amenorrhœa. Her full habit, glowing cheeks, red lips, and general picture-of-health appearance, told heavily against anemia. Close questioning revealed that she had a beau. Being a strict Catholic, she had always forbidden him sexual indulgence, but she had allowed him to skirmish the marriage state by placing his penis against the vulva, and thus lying together without intromission. While in this position, an emission had occurred.

This was a puzzle. Was she pregnant? Time will tell, I thought; so writing a placebo prescription, she was dismissed.

A few months later she came boisterously into my office, sobbing and lamenting, "Oh! I know it is so—I know it is so; I feel it more," she cried. A digital examination, aided by a thorough ocular inspection, showed an unruptured hymen, with a circular opening the size of a dime. Auscultation gave clearly the fetal heart-beat, and in due time a bouncing boy was announced to the world. This would seem to illustrate again the possibility of impregnation without the semen being injected within the uterus.

One criticism I would suggest of Dr. Cass' report of April 12, in the *REPORTER*. He censures Americans as being led too easily by European teachers, and hints that we follow them in their theories of conception. In Reese's edition of Taylor's Medical Jurisprudence, occurs the following paragraph, page 718: "It has been a question, whether when intercourse has taken place against the will of a woman, pregnancy could possibly follow. It was at one time thought that the will of a woman was always necessary to the act of impregnation, and therefore if she became pregnant she must have consented to the act, and that the charge of rape was unfounded. Such a defence would not be admitted. Conception, it is well known, does not depend on the consciousness or volition of a female. EVEN PENETRATION TO THE VAGINA IS NOT ABSOLUTELY NECESSARY FOR IMPREGNATION." C. C. VANDERBECK, M. D.

Philadelphia.

NEWS AND MISCELLANY.

Iowa State Medical Society.

Reported by J. F. KENNEDY, M. D., of Des Moines.

The thirty-second annual session was held in Des Moines May 21–24, with President S. E. Robinson, M. D., in the chair. The attendance was unusually large, owing to the fact that Iowa had sent to the American Medical Society at its late session the largest delegation present except that from Pennsylvania. There were 122 registered as permanent members and 66 as delegates, making the total number present, including visitors who became members by invitation, fully 250.

The session was one of the busiest ever held by the society.

At 2:30 p. m., 21st, President Robinson delivered his annual address, in which he said:

"I desire for a few moments to call your attention to the present condition, socially and ethically, of the medical profession in the State; as observed from my standpoint as a country practitioner. And while I believe this to be quite a pleasing condition in both these particulars, I may suggest something in the way of further improvement. It is, perhaps, more difficult for one to judge of present conditions and tendencies of a class, of which he is an integral part, and of its needs, than of any other question which he could consider. One could easily judge of the condition of a class or a profession in the past, if he were furnished with the history of its surroundings; but our judgment is liable to be warped by personal interests when we come to investigate present conditions of a class to which we belong. There seems to me to be good reason for satisfaction with the social standing of our fraternity. We here in Iowa have no especial ranks or grades in society to strive for or boast of, but we have in every community varying degrees of education and intellectual attainment; and the honest, intelligent physician everywhere, in city and country, finds himself associated with the best intelligence, and a co-worker and peer of the best educated in every community, a welcome visitor in health as well as in sickness, in every grade of society in the community in which he lives. But we find that nearly every locality is able to judge between the intelligent, educated physician and the ignorant, uneducated pretender who may, in some unaccountable way, have attained the title of "Doctor." The first is usually a leader in society, looked up to as an adviser and counsellor in educational, literary, and social affairs, while the latter has no place except as a hanger-on, being tolerated, but not desired, in any neighborhood in the State. And yet, by reason of legislation in some of our neighboring States, tending to protect their citizens from this kind of impostors, we have more than our just proportion of this class of parasites subsisting upon the uninformed and unfortunate. And I believe it to be the duty of this society, and of the individual members of the profession, to renew and redouble the effort recently made to secure such legislation as shall be a partial protection, at least, to the people of the State from the plundering by the soulless villains who are ready to prey upon the credulity of the poor and suffering, and to relieve our State from the odium that attaches to it as the cess-pool for the degenerate material thrown off by the profession of neighboring States, by the help of good legislation.

"There is probably no man in any community who has or could have greater political influence than the practicing physician; he comes in contact with every class in the community, the educated and the ignorant, the rich and the poor, and with all he stands in great respect, every one esteeming his judgment and highly respecting his opinions. Yet there is, perhaps, no class of equal number, who really exercise so little political influence, in matters of which it is recognized to be most thoroughly informed, and upon which it is so nearly agreed. There must be some reason for this, and for the common outside prejudice that

exists which becomes apparent so soon as we as physicians urge the consideration by our legislature of any matter having any relation to our profession. Just so soon as we were agreed upon a law which we could recommend to the legislature and to the people, as furnishing them some protection and tending to secure for them better medical service (this we accomplished without difficulty when we first considered the matter), then we heard from every school district in the State a cry 'that the doctors are trying to secure protection; they want a law enacted that will give them better business and increase their income.' Now, why was this so, and why did the people and the law-makers misjudge our motives? They will give us credit for honesty and integrity in other matters, why not in this? I think it may be due in some measure, at least, to our professional sensitiveness. We all know that professional benefits were not thought of by the committee that gave especial consideration to the question of medical legislation, and we all with one accord said so—and the law has not yet been enacted. The majority of the profession ceased to actively use their influence in that direction, lest their motives continue to be misjudged, and the few who continued to urge it could only fail of success. Suppose it were true that we were in need of protective law, or would be benefited by the measures proposed and desired, is there any disgrace attached to that? Do not men engaged in every other legitimate business desire and work for such measures as shall enable them to pleasantly and profitably pursue their several avocations; the farmer and the mechanic, the merchant and the manufacturer, and all the rest? Then why need we explain, deny, and apologize when such measures are proposed, if they be construed to work for our benefit and make our profession more profitable and its practice more pleasant, even though these measures were conceived with no such end in view? I therefore believe that it is advisable that this society urge upon its members, and the members of the profession throughout the State, that they use their influence with their legislators and in the several communities in which they live, in favor of such a law by our State legislature as shall give protection to the citizens from impostors in medical practice; and esteem it no disgrace, if it operates to protect the business of their profession at the same time that it saves their patrons' purses, their health, and often their lives."

Dr. Caldwell moved that a committee of three be appointed on the president's address, of which Dr. McCleary, of Indianola, shall be chairman. The chair appointed Drs. McCleary, Hill, and Caldwell.

After transacting the preliminary business, the following papers were read as per programme:

"Report of Committee on Medicine," S. B. Chase, Osage, chairman; "Acute Catarrhal Pneumonia, a Primary Disease," G. E. Crawford, Cedar Rapids; "Contusion of the Brain from Contra-coup—a Contribution to Cerebral Localization," J. H. Green, Dubuque; "Glucose," W. D. Middleton, Davenport. Dr. Middleton gave an interesting account of the manufacture of this product, and suggested that as an article of food in certain conditions of mal-nutrition from an inability on the part of the liver to convert the food into grape

sugar, this digested product, glucose, might be used to advantage. He gave some clinical facts coming under his observation, confirmatory of his suggestions.

D. W. Smouse, of Des Moines, read a paper on "Locomotor Ataxia, with Case," detailing a case he had under treatment, the result being that the case was going from bad to worse.

R. J. Farquharson, Secretary of the State Board of Health, read an interesting though very lengthy "Report on Hygiene and Sanitary Science."

A. W. Cantwell, of Davenport, read a "History of the Davenport Board of Health from its Organization."

Robert McNutt, of Des Moines, read an exhaustive paper upon "Ethnic Forces," which presented some curious facts in relation to the hybridity of races as a cause of physical and mental decay. He begins away back in the dawn of human history and the mists of antiquity, and seems to adopt the views of Haeckel that primitive man lived upon the earth 100,000 years ago—that the various types of mankind are exceedingly persistent, and do not diverge or change their ethnical characters to any perceptible degree during tens of thousands of years, no matter to what opposite extremes of climate and food they may have been subjected. He would, therefore, class the leading types as not having had a common origin. That the inferior races—the negro, the Dravid, and the Mongol—had long precedence on the earth before the Aryan appeared; that the Aryan is the only true historic and progressive race, and that little or nothing can be expected of the side-races in working out the great problems of civilized life.

He shows that the Aryan colony that pushed its way east into India made remarkable progress while the stock was kept pure, but in time they absorbed Dravidian blood, and fell, as a consequence, into that degenerate condition witnessed at the present day.

Egypt, the cradle of the sciences, was also an exceedingly progressive country while the Khamitic white blood was pure, but, absorbing the taint of the African, lapsed into a stationary condition, and then decay and ruin. He claims that the Malay and the Mound-builders and the hunting Indian are hybrids or crosses between the original Mongol and Dravidian, possessing the bad qualities of both races, similar in physical and mental characteristics, being *morose* and *brutish* in their nature.

He classes the African as the oldest of the races, and nocturnal in habit, and a natural born rapist. He shows that this type, when crossed with pure Aryan stock, produces the worst specimens of humanity, both as to diseased and debilitated physical conditions and horrid mental depravities. He shows from the reports of the penitentiaries of Virginia and Louisiana and Missouri, that this hybrid population furnishes the great bulk of the criminal class in the states where the African is numerous. He then gives the pure Aryans of the great republic of the west a gilded painting of their wonderful progress in useful inventions and their advancement in arts, sciences, and law, and thinks that it will continue in the onward march for ages to come, provided the Aryan stock can be kept pure.

He suggests that the law-making power should

decree any attempt at miscegenation as the highest crime against the state and against the nation. It was punished as a capital crime in India, but in time it failed to save them, and they were utterly lost.

S. B. Thrall, of Ottumwa, read a very practical and suggestive paper upon "Boards of Health and Contagious Diseases."

M. G. Sloan, of Dexter, reported a case of "Perityphlitis."

G. P. Hanawalt, of Des Moines, read the following paper on "Bichloride of Mercury in Surgery, in which he said:

"How gladly will we welcome corrosive sublimate, which, in the language of Dr. Neer, of New York, is 'antiseptic more potent, safer, not volatile, and easily obtained everywhere.' The reading of the excellent paper by the above-named gentleman in January last, preceded by a conversation with his estimable partner, Dr. Henry Abbe, of New York city, on the subject now under consideration, caused my first experiments in the use of this, to me, new antiseptic, since which time it has been my standard, and has yet to disappoint.

"An idea of the germicidal property of bichloride may be gained from the fact that the recent developments of Koch in Germany, and of Dr. Sternberg in our own country, prove beyond doubt that in a fluid literally creeping with bacteria the organisms were quieted by adding $\frac{30}{1000}$ ext. of the salt, while $\frac{20}{1000}$ part ended all activity present and future. The fluid thus treated failed to produce putrefaction in other organic solutions. Acting on this wonderful statement as to its antiseptic and germicidal qualities, Dr. Thallon, of Brooklyn, N. Y., adopts the use of the bichloride internally in the various forms of diphtheria, contending, with much reason, sustained by clinical proof, that a quite sufficient quantity may be taken into the system with entire safety to destroy, or at least to greatly modify, the septic process in the blood in this terrible disease. It is well worth a trial, for we all know with what feeling we regard the invasion of septicæmic symptoms—the feeling of being far out at sea, with neither compass, book, nor anchor.

"And now as to method in surgical use. A solution containing gr. viij. to Oj. of water, or what is better, eight grains dissolved in strong alcohol, and added to a pint of water, is about $\frac{1}{1000}$ in strength and about the proper strength for general use, although this may be varied considerably, $\frac{20}{1000}$ being doubtless strong enough for most cases.

"Supposing that a compound fracture is to be treated; of course the parts are to be cleansed and adjusted (I mean really cleaned and scrubbed—shaved, if need be, and scoured—under an anæsthetic if required; for if ever cleanliness is well repaid it is in the grateful appearance of comfort about a clean compound fracture as compared with a dirty one), then thoroughly bathed with sponges that have been soaked in and squeezed out of the above solution. Every bit of dirt, blood, etc., should be mopped out, being careful to remove any useless fragments of bone or soft tissues, carefully bringing all parts as nearly to proper place as may be, and adjusting the limb upon whatever splint may be chosen, first envel-

oping the injury in oakum, absorbent cotton, or 'cheese cloth' (which has previously been wrung out of the bichloride solution) laid about in even layers, so as not to disturb by unequal pressure; the whole to be surrounded by a thin roller of 'crinoline,' or gauzy material, likewise treated with the solution. This dressing is to be let alone until the oozing from the wound is seen on the outside of dressing, at which time, if there is no marked increase in temperature, a few layers of fresh dressing may be applied without disturbing the original, and then left again for a day or two, when the dressing, sutures, and drainage-tube (if any have been used) may be removed, and a dressing, similar to that used at first, may be applied; and, in most cases, may be left alone for a considerable length of time, some even for twenty, thirty, and even more than forty days, if we are to credit the statements recently published; but I would not advise, much less practice, this continuous delay in removing dressings, as beyond ten or fifteen days 'tis thought that danger from septic complication has passed, and there is nothing gained by clinging to stale dressings when clean and fresh ones may be applied easily and with great comfort to the patient.

"If an amputation has been done, the vessels are to be secured with catgut ligatures, which have been thoroughly soaked in the solution of bichloride, then kept in absolute alcohol until used—the stump is to be cleaned of every speck of blood and debris of every kind, by thoroughly wiping and pressing with the purified sponges and solution, as in case of fracture. After all oozing has ceased (and not before), the flaps are to be approximated carefully and united by the continuous suture—using the finer catgut, if choice can be made, treated as in case of ligatures—leaving ununited space only at proper places for the ends of the drainage-tube. The stump may then be literally slushed with the $\frac{1}{1000}$ or $\frac{20}{1000}$ solution by means of a fountain syringe fitted to the projecting end of the tube, and kept running until the liquid comes through unstained.

The stump, including ends of tube, may be covered by ample layers of well-picked oakum, jute, cotton, or soft thin fabric of any kind, and well bound with a thin roller, all of the dressing having previously been treated with the favorite solution. This thin and gauzy bandage is made use of because its light texture is not only comfortable to the patient, but allows the surgeon to detect the slightest oozing from the wound, thereby being able to decide when his dressing should be removed.

"Perhaps the best time to remove the drainage-tube will be on the third or fourth day, when this may be done, leaving the sutures and ligatures to take care of themselves, which, if catgut has been used, prepared as directed, need give the surgeon no uneasiness, as they will readily absorb, leaving nothing to be removed as in the case of wire or silk. If at this time the dressings have become saturated by discharge, or if patient's temperature has materially increased, a clean dressing throughout, much like the first, may be applied—but if there is little or no stain through outer dressing, and especially if comfort is the prevailing feeling, the drainage-tube alone is to be removed, and no further disturbance of

parts or dressings made for three or four days, perhaps longer.

As to toxic effect by absorption of this solution, the nearest I have seen was an attack of diarrhoea, possibly attributable to dressing, in a weak girl after amputation at middle of thigh, which, however, was rapidly cured without abandoning the dressing.

Dr. Weiss states that beyond a slight irritation about the edges of the wound, he has not not seen anything like poisonous effect from the use of this solution. This record will surely compare favorably at least with any of the well-known antiseptics.

Instruments may not be dipped in this solution on account of its well-known corroding or marring tendency—a one-twentieth solution of carbolic acid being much better for that purpose. Dr. Abbe mentions the fact that immersing the hands alternately in solutions of carbolic acid and bichloride causes a dirty blackish deposit in the crevices of the skin, which is readily removed by washing in a very weak solution of muriatic acid.

In conclusion, it may not be amiss to refer to the well-known virtues of this solution as a gargle—alike in diphtheritic or specific lesions of mouth and throat—and also to the testimony of leading dermatologists as to the satisfactory result of its use in an acne.

If, then, to its well-known virtues as a general remedy, we add potency, cleanliness, and trifling cost, as an antiseptic, deodorizer, and germicide, we are not far from an ideal "up-to-date" drug.

Dr. W. F. Peck differed from the paper, holding that perfect cleanliness and nature would ordinarily do away with any necessity for the use of antiseptics.

D. C. Brockman, Marengo, read a paper on "Improved Jacket Brace for the Treatment of Spinal Curvature."

"Leprosy" was the subject of a paper read by R. J. Farquharson, Des Moines.

Henry Ristine, of Cedar Rapids, reported a case of "Nerve-stretching;" and C. M. Hobby, of Iowa City, a case of "Malignant Degeneration of Benign Tumors."

J. Williamson, of Ottumwa, presented a report as chairman of section on "Obstetrics and Gynecology."

Jennie McCowen, of Davenport, read a paper upon "Insanity in Women," which she concluded by saying:

"We are gradually being emancipated from the habit of viewing mind as a mysterious, intangible entity, the sequences of which, in both normal and abnormal states, might be evolved from the inner consciousness of the observer, and are beginning to accept the more rational theory that (whatever the nature of mind) its manifestations take place through the nervous system, and the derangements are the result of nervous disease, to be studied by the same methods of investigation as other nervous disease; that insanity is not a metaphysical entity, but a disease of the nervous system manifesting itself by physical as well as mental symptoms.

"I can but think that the future of psychology is to come through a more careful study of the relations subsisting between physical conditions and mental states—not the abstract acceptance

of the theory merely (which is not a new one to the profession), but the practical and painstaking application of it to individual cases. And as the hospital physician rarely sees the disease in its earlier stages, the experience and observation and study of the general physician as well, is necessary in order to arrive at the whole truth.

"A disease which deprives a man of his rights and privileges as a member of the community in which he lives; of his right to manage his own business affairs in his own way; of his right to testify before a judicial tribunal; of his right to liberty and the pursuit of happiness according to his own methods; of his right to the enjoyments of home, to the society and care of his family, to himself; a disease which tends neither to recovery nor to death, but to chronicity—during which its subjects cease to be producers and become consumers through long periods of years; a disease which year by year seems to increase in frequency and at the same time to yield less readily to treatment, may surely claim from us the most careful study by the most approved methods known to the profession."

An excellent practical paper on "Obstructive Dysmenorrhœa" was read by G. O. Morgridge, of Muscatine, and one on "Uterine Therapeutics," by Robert Stephenson, Centerville.

A paper detailing the treatment of a case of "Stricture of the Esophagus" was presented by E. W. Clark, Grinnell.

H. B. Young, of Burlington, made a report on "Ophthalmology and Otology," and he was followed by a paper by F. E. Crittenden, Des Moines, on "Treatment of Obstruction of the Lachrymal Canal."

J. K. Gardner related his experience with the new hypnotic, "Paraldehyde."

The following report was made by the Committee on School Hygiene:

The undersigned, your committee to whom was referred the subject of school hygiene, for the purpose of calling the attention of the State Board of Health to some of the more important defects in the present methods of educating children, often brought to our notice as physicians, respectfully submit the following report:

WHEREAS, The attention of this society having been directed to the imperfections in the location, construction and arrangements of school buildings; also to the management of pupils by parent and teachers; therefore,

Resolved, 1st. That ample play-grounds, with proper shade and drainage, should be carefully considered by school boards.

Resolved, 2d. That school houses should not be more than two stories in height, that the rooms should be supplied with abundant means for supplying fresh air and ventilation, so as to secure an equable temperature at about 70° F. Furthermore, that the stairs should be wide but not steep, and the doors for egress should be large enough and open outward.

Resolved, 3d. That desks should be so arranged that the light will be introduced on the left side if possible, upon the right side, or from behind, but never so as to strike pupils squarely in the face.

Resolved, 4th. That we condemn the practice of sending children to school before they are seven

years of age; also the tendency to the "cramming" process which so often checks, rather than promotes, physical and mental development. Again we urge greater discretion on the part of parents about putting children into school in special cases, when the health is imperfect, or where the child is remarkably precocious.

Resolved, 5th. That this Society request the State Board of Health to take some action to bring this subject to the attention of the State Superintendent, the County Superintendents, and Boards of School Directors.

Resolved, That the Board of Health should also make known the facts collected and tabulated, regarding the increase of diseases of the eye in school life; also, impart instruction in the methods by which this organ is relieved of the excessive strain which modern civilization makes upon it.

Wm. Watson, H. A. Gilman, George F. Jenkins, G. H. Hill, E. H. Hazen, Committee.

The following is the list of officers, the standing committees, and the representatives of the Society to the American Medical Association for the ensuing year:

President.—H. C. Huntsman, Oskaloosa.

First Vice-President.—H. B. Ransom, Burlington.

Second Vice-President.—C. C. Griffin, Vinton.

Secretary.—J. F. Kennedy, Des Moines.

Assistant Secretary.—G. E. Crawford, Cedar Rapids.

Treasurer.—G. R. Skinner, Cedar Rapids.

Place of Meeting.—Cedar Rapids, on the third Tuesday of May, 1885.

Committee of Arrangements.—H. Ristine, Cedar Rapids; C. M. Hobby, Iowa City; A. B. Reed, Cedar Rapids; W. E. Egan, Atlantic; G. R. Henry, Burlington.

Committee on Publication.—J. F. Kennedy, L. C. Swift, Des Moines; W. D. Middleton, Davenport; J. Williamson, Ottumwa; G. R. Skinner, Cedar Rapids.

Committee on Necrology.—First district—J. A. Scroggs, Keokuk.

Second district—A. W. Cantwell, Davenport.

Third district—S. N. Pierce, Cedar Falls.

Fourth district—L. P. Fitch, Charles City.

Fifth district—W. C. Schulze, Marengo.

Sixth district—E. W. Clark, Grinnell.

Seventh district—W. H. Ward, Des Moines.

Eighth district—P. Llewellyn, Clarinda.

Ninth district—J. D. Holmes, Audubon.

Tenth district—J. A. Meredith, Ames.

Eleventh district—G. W. Briggs, Sioux City.

Committee on Ethics.—S. E. Robinson, West Union; J. D. McCleary, Indianola; A. W. McClure, Mt. Pleasant; P. S. Mosher, Boone; W. S. Robertson, Muscatine.

Delegates to American Medical Association.—First district—Dr. J. Maxwell, Keokuk; Dr. Scroggs, Keokuk; Dr. Stever, Fairfield; Dr. A. A. Gillman, Mt. Pleasant.

Second District—Dr. Adair, Anamosa; Dr. W. S. Robertson, Muscatine; Dr. A. B. Bowen, Maquoketa; Dr. W. D. Middleton, Davenport.

Third District—Dr. Wm. Watson, Dubuque; Dr. G. B. Wood, Fairbanks; Dr. D. M. Wicke, New Hartford; Dr. S. N. Pierce, Cedar Falls.

Fourth District—Dr. A. D. Bundy, St. Ansgar; Dr. Gardner, New Hampton; Dr. D. S. Brainard, Stacyville; Dr. S. B. Chase, Osage.

Fifth District—Dr. S. S. Lytle, Iowa City; Dr. G. R. Skinner, Cedar Rapids; Dr. D. C. Brockman, Marengo; Dr. C. C. Griffin, Vinton.

Sixth District—Dr. G. P. Clarke, Prairie City; Dr. S. B. Thrall, Ottumwa; Dr. J. R. Gorrell, Newton; Dr. H. C. Huntsman, Oskaloosa.

Seventh District—Dr. M. G. Sloan, Dexter; Dr. L. H. Sweber, Colo; Dr. G. P. Hanawalt, Des Moines; Dr. E. T. Likes, Winterset.

Eighth District—Dr. J. B. Wilson, Creston; Dr. L. S. Graves, Afton; Dr. P. W. Liewelling, Clarinda; Dr. W. H. Gibbon, Chariton.

Ninth District—Dr. W. E. Egan, Atlantic; Dr. J. E. Sanson, Anita; Dr. C. H. Pinney, Council Bluffs; C. W. DeMotte, Shelby.

Tenth District—L. J. Alleman, Boone; D. S. Fairchild, Ames.

Eleventh District—J. D. McVay, O. D. Donley, G. H. Grimmell, Charles Enfield.

The committee recommended that the incoming president have the power to fill all vacancies on committees and delegations, and to send delegates to neighboring state medical societies.

FACETIOUS.

S. E. Robinson, for — Guthrie, offered the following resolution, which was unanimously adopted:

Resolved, That the Legislature of the State of Iowa be requested to frame a law making it obligatory that the formulary of patent medicines and proprietary medicines be printed on the inside labels of the package or bottle, so that an antidote for such poisons may be had in time to save the patient.

After the induction of the new officers into their respective stations, and the usual votes of thanks, the final reports of the officers were presented.

A. Von Mansfelde, the efficient Secretary of the Nebraska Medical Society, was present during the entire session, and contributed largely to the interest of the sessions by his participation in the discussion of several papers.

Thomas Siveter, who had been carried on the *mortuary* list of the society for several years, was present, and made several interesting little speeches. He was one of the organizers of the society, and is 85 years of age, and bids fair to become a centenarian.

There were from eight to twelve lady physicians in attendance. Their respectful attention, punctual attendance upon all the sessions, modest demeanor, and lively interest in all the papers and discussions, won for them all the profound respect of the sterner sex, and may have had something to do in leading several members to remark that not on any occasion was any member thought to be under the influence of intoxicants.

Illinois State Medical Society.

At the meeting held in Chicago, May 20, 21, and 22, the following officers were elected for the ensuing year:

President.—Dr. Daniel S. Booth, of Sparta.

Vice Presidents.—Dr. S. C. Plummer, of Rock Island; and Dr. W. T. Kirk, of Atlanta.

Treasurer.—Dr. Walter Hay, of Chicago.

Secretary.—Dr. S. J. Jones, of Chicago.

Assistant Secretary.—Dr. H. B. Buch, of Springfield.

South Carolina Medical Association.

Officers for the ensuing year:

President—Dr. A. A. Moore, of Camden.

Vice-Presidents—Drs. C. Kolloch, of Cheraw; James Evans, of Florence; and T. J. McKie, of Woodlawn.

Recording Secretary—Dr. John Forrest, of Charleston.

Corresponding Secretary—Dr. H. D. Fraser, of Charleston.

Treasurer—Dr. H. W. DeSaussure, jr., of Charleston.

The Association meets in Charleston, April 23, 1885.

West Virginia Medical Society.

Officers for ensuing year:

President—Dr. George Baird, of Wheeling.

Vice-Presidents—Drs. T. A. Harris, of Parkersburg; R. R. Frey, Terra Alta; and S. H. Austin, of Lewisburg.

Treasurer—Dr. John A. Campbell, of Wheeling.

Secretary—Dr. S. L. Jepson, of Wheeling.

Board of Censors—Drs. J. H. Manown, L. C. Hunt, J. H. Brownfield, J. O. Wall, J. M. Bowcock, W. J. Bland, and D. W. Allen.

Weston was selected as the place of meeting for next year's session.

American Climatological Association.

At the meeting held in Washington, May 3 and 5, the following officers were elected for the ensuing year:

President—Prof. A. L. Loomis, of New York.

Vice-Presidents—Drs. F. I. Knight, of Boston, and W. H. Geddings, of Aikens, South Carolina.

Secretary and Treasurer—Dr. J. B. Walker, of Philadelphia.

Council—Drs. J. H. Tyndale, of New York; E. T. Bruen, of Philadelphia; E. D. Hudson, of New York; Frank Donaldson, of Baltimore; Beverly Robinson, of New York.

California State Medical Society.

At the meeting held in San Francisco, April 16 and 17, 1884, the following officers were elected for the ensuing year:

President—R. Beverly Cole, San Francisco.

First Vice-President—W. S. Thorne, San Jose.

Second Vice-President—W. P. Gibbons, Alameda.

Third Vice-President—A. H. Agard, Oakland.

Fourth Vice-President—H. J. Crumpton, Lakeport.

First Assistant Secretary—Dr. Powell, Marysville.

Second Assistant Secretary—Mrs. L. M. F. Wanzur, San Francisco.

Treasurer—F. W. Hatch, Sacramento.

Texas State Medical Society.

At the sixteenth annual meeting held in Belton, April 22, 23, 24 and 25, the following papers were read:

"Evolution," by Dr. R. W. Park, of Waco;
"The Mineral Waters of Texas," by Dr. J. M. Willis;
"Periosteum Grafting," by Dr. C. M. Trueheart, of Galveston;
"Animal Ligatures," by Dr. H. W. Dudley, of Hillsboro.

Officers for the ensuing year:

President—Dr. H. C. Ghent, of Belton.

Vice-Presidents—Drs. E. P. Becton, of Sulphur Springs; H. H. Darr, of Caldwell; and M. Matkin, of Hearne.

Secretary—Dr. W. J. Burt, of Austin.

Treasurer—Dr. J. Larendon, of Houston.

The Association meets in Houston, Texas, on the fourth Tuesday in April, 1885.

Lack of Refinement in the American Medical Association.

A resident of Washington writes to the *N. Y. Med. Jour.* as follows: "The usual disgraceful performances took place at the receptions. Mrs. L. generously opened her beautiful house, and provided as fine a table as Demenet could serve. She was rewarded by having men stalk in (hats on their heads) from the front room to the dining-room, where they fought like wolves for places at the tables, overturning piles of plates, breaking her expensive ornaments, and soiling her rugs with pools of tobacco-juice."

We all know that a small army of hangers-on attend the meetings of the American Medical Association, and that most of these fellows manage to get cards admitting them to the receptions, where their boorishness tends to bring the Association into discredit. In view of these facts, it seems to us that the interest of the profession would be furthered if measures were taken to put a stop to the admission of these interlopers.

Items.

—Medical London has been exercised over the fact that John Bright, who has been ill, called on a homœopath to attend him.

—The published report of an English benevolent society says: "Notwithstanding the large amount paid for medicine and medical attendance, very few deaths occurred during the year."

—At a meeting of the Cincinnati Medical Society, March 25, Dr. Sattler said that while no bacilli were found in the breath of phthisical patients, yet plates of glass covered with glycerine and hung in consumptive wards became covered with bacilli.

QUERIES AND REPLIES.**EDS. MED. AND SURG. REP.—**

Will you or your many readers, through the MEDICAL AND SURGICAL REPORTER, give a treatment for a case that has resisted all therapeutic efforts? The patient, about one year since, had syphilis, though now no symptoms remain. About two months since, after sexual intercourse (and even at longer intervals without it) the penis is seized with intense itching, which is followed by small vesicles that contain serum. These dry up and there is no more trouble until another act of coition or the elapse of several weeks without the act. I have used various local applications, and iodide potash, mercury, arsenic constitutionally. Mc.

DEATHS.

DAY.—In Mechanicsburg, Pa., Monday, May 12, 1884, after a short illness, Dr. Alfred Day, in the fifty-fifth year of his age.

THE MEDICAL AND SURGICAL REPORTER.

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[Vol. L.—No. 24.]

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

INFLAMMATION OF THE EAR, AND ITS RELATIONS TO WHAT IS COMMONLY CALLED "TAKING COLD."*

BY BENJ. J. RUDDEROW, M. D.,
Of Philadelphia.

In presenting my paper this evening, it is not as an expert nor to specialists in this branch of medicine that I wish to speak, but to place before the general practitioner some few points that may help prevent some of the bad results which are so frequently met with as coming from the tardy, timid, or ignorant management of such ear affections as arise from an ordinary catarrh, or that happen as one of the complications of sore throat, measles, or scarlet fever. It is from the so-called taking cold that we find many of the acute or middle-ear diseases arising. When one is attacked with a cold, or has a more or less acute catarrh, it is generally traceable to a sudden or unexpected fall in temperature, or the exposing of a limited portion of the body to moisture, or it may be the cooling effect of air in motion, or the depressing effect of air overheated or impure in assembly rooms, dormitories, etc. It often happens that the best conditions of ventilation and heat cannot be had; then how may the body be prepared to not only withstand the inevitable exposure, but to make a draught of air one of pleasure and one of health?

Living as we ordinarily do, without a sufficient amount of active exercise out of doors, the sur-

face of our bodies becomes morbidly sensitive to those influences that produce an acute catarrh. Thus one finds amongst people great dread of a draught, and the average person will rather incur the risk of contracting a fever or some contagious disease in a crowded vehicle or assembly than that he should have these places freely ventilated. By far the greater majority of mankind, while resting, consider air in motion to be one of the most morbid influences that one may meet. It is this, I think, that presents us many obstacles in the way of properly ventilating public vehicles and buildings. We do not, I think, find many persons so educated as to endure, when at rest, air in motion, far less to find pleasure and health from it.

But I speak from experience when I say that it is very easy to overcome this morbid sensitiveness and often fatal tendency to become an easy victim to the causes of a common cold. But how may one teach himself to endure a draught and lessen the tendency to catch cold? By first diminishing the morbid sensibility of the body to catch cold, and this can best be brought about by a graduated exposure and friction of the skin in a daily air- or sun-bath, to be followed by such local sponge-baths as one may be able to react from speedily. For this reaction to be speedy and spontaneous, it is necessary that the temperature of the water should not be much lower than 80° Fahr.

With the first air-bath it is well that the body should be exposed but for a short time only, as, for instance, the time taken to walk briskly across an ordinary bed-chamber. Soon, by a little practice in this way, the time of exposure may be

* Read before the Philadelphia County Medical Society.

prolonged to fifteen or twenty minutes, and temperature of the bath used accommodated to that of the outer air. The healthful effects of these exposures may be still further increased by two or three deep, chest-filling inspirations, with closed mouth, and by few such movements of the arms as would tend to invigorate the chest-muscles and quicken somewhat the action of the heart. About four times a week, before any water is applied, and while taking the air-bath, the whole surface of the body should be briskly rubbed till there is a sense of glow and warmth of the skin, with hair-mitten, flesh-brush, or coarse towel. These exercises should at first be of short duration, and more especially so if the heat-producing powers of the body are low. Also, if the subject be not too feeble, the rubbing should be done by himself rather than by another, as it is thus made more beneficial. These exercises should, in all cases, not be attempted in winter, except in a sunny room or one heated artificially.

We should bear in mind that the object of our treatment is to make the body less morbidly sensible by the exposing of the entire skin surface daily to air, light, friction, and cleansing, in an atmosphere nearly like the prevailing temperature. These daily air-baths should not be indulged in for too long a time, nor yet should invalids indulge in the full practice at once, but enter upon it deliberately and cautiously, as one not knowing how to swim enters the water gradually. These few hints, with the cautions given, will, in a few weeks, make almost any one not only less susceptible of taking cold, but better in every way; but at the same time I do not wish it to be understood that by training the body to be less susceptible to the sudden changes in temperature, that one may with impunity, without hat or coat, stand exposed to a northeaster.

In the preventive treatment of catarrhal affections of the middle ear, food, clothing, and exercise are hygienic factors that have important relations in the causation of catching cold. Alcoholic stimulants, even in moderate doses, do increase the liability of taking a cold, and one who has been deluded by the idea that by so doing he can keep out cold, had best immediately put on an additional covering to keep his animal heat in. As a rule, except in certain conditions, alcohol is a very bad food, and what those conditions are has not as yet been determined with anything approaching an agreement by even the most learned chemists and physiologists. Articles of food that help produce dyspepsia, such as greasy fries, hashes, and other messes found on the tea and

supper table, so fearfully and wonderfully made, should be avoided. Train the stomach and digestive organs to be the servant, not the master; keep them in vigorous action by the use of coarse farinaceous foods and milk. The farinaceous articles of food contain not only many tissue-building ingredients that are indispensable, but in a mechanical way, by their contact with the digestive organs, do a work similar to that which friction of the skin does for the surface of the body in hastening the desquamation of effete and sticky epithelium and the cleansing of the follicles.

Let the breakfast be one of thoroughly boiled farinaceous food, eggs, milk or cream, and fruit; a light lunch of fruit, or milk and bread; dinner hearty, but free from condiments and spices, including fish, meat, and vegetables; the tea somewhat similar to the breakfast. As to clothing, flannel should be worn next the skin, day and night, by persons of all ages. The notion that one can toughen children by insufficient clothing and a promiscuous diet, is a fallacy, as we all know.

We often meet people, otherwise intelligent, who keep the legs and chest of their children bare, and go themselves without flannels from the supposed good health of savages and paupers. The flannels worn by day should be changed at night, and when taken off should be turned inside out and allowed to dry and air thoroughly. The neck-ties and bands should be loose, so as not to check the return circulation in the neck; the foot-covering thick, loose, and low-heeled, with a broad sole, allowing the interosseous spaces room, so as not to press on the nerves and vessels that vivify the toes.

From the preventive measures, we will pass to some of those conditions which demand promptness on the part of the medical practitioner in his effort to cure the external or middle ear inflammation at the earliest moment. It is not necessary to systematically go over the various diseases, my purpose being to give a few points that may be of use to the general practitioner, and not my views or opinions as an expert.

Every medical man should be able to distinguish the drum-head or tympanic membrane, and any one who can introduce a catheter can incise a drum-head. Ear-ache, generally badly treated, arises commonly in the beginning from one or two forms of ear disease, either inflammation of the dermoid or periosteal lining of the external auditory canal, or an acute inflammation of the middle ear. Pain and deafness often occur in the course of common boils in the external auditory

canal. How is one to make the distinction between such a disease or something deeper seated. Each one should make himself so familiar with the external auditory canal as to tell at sight, whether a given canal is changed in calibre or not; and if changed, what is the nature of the change. Inspect the canal, and with a probe, guarded with a piece of cotton, explore it thoroughly, carrying the probe around its entire circumference, touching each segment. In this way one can ascertain whether there is a focus of local inflammation, and having found it, then with a sharp, curved bistoury, incise clear down to the bone. The earlier this is done the better. After the incision is made, foment the ear with warm water from a fountain syringe; poultices in these cases are to be avoided, as the uninterrupted application of heat tends to beget œdema, making the canal more or less boggy, thus helping to produce a successive crop of boils, or setting up an obstinate or diffuse inflammation. If incision should do no good, apply one or two leeches in the hollow, at the base of the tragus, half an inch in on the front wall of the external auditory canal. Two or three leeches applied in the position mentioned I have found to do more good than when applied in front of the tragus, or over the mastoid, except there be an inflammation of the mastoid cells, commencing to outcrop behind the external ear.

Persons consult us in reference to pain and deafness in the ear; they tell us that they have had a cold, a sore throat, or have been using a nasal douche; their rest has been broken, they have had continual pain and agony; what are we to do—order a poultice, and give an anodyne to relieve the pain, or, if in the case of a child, tell the parents to apply a poultice and await the discharge of pus? It is just such cases treated in this way that go to make up a large bulk of incurable cases of otorrhœa; they are the ones that worry the aurist by their obstinate character, and end in temporal or bone disease. When consulting a patient suffering as above, act promptly. Take the hearing distance with the watch, examine the auditory canal, and see that there is no inflammation there external to the drum-head. Apply leeches inside the hollow of the tragus, favor bleeding by hot fomentations, and if the pain and deafness are not relieved within a few hours, incise the drum-head with a fine straight knife or bistoury. Carry the incision from just below the extremity of the long process of the malleus to the lower border of the membrane. After this has been done, inflate the ear with a Politzer inflator, or get the patient to hold his nostrils closed

by means of his fingers, and then blow strongly with closed mouth into the nostrils.

Syringe the ears with a warm solution of salt and water, carbonate of soda, or boracic acid. This syringing with warm water is objected to by many. After the syringing give your anodynes; not before, as the relief given before the incision may mask the processes going on in the ear, and stupefy your patient until something bursts, that meaning generally a more or less hopeless rent in the membrane, or, this not happening, a thorough invasion of the mastoid cells. Repeat the leeches, if necessary, and the paracentesis, to cut short the inflammation. Though the paracentesis should be done every day for a week or more, one need not not be afraid, I think, of injuring it, as it will not do as much harm as to leave the products of inflammation dammed up in the drum-cavity, to destroy by their macerating process the machinery, threaten the portals of the internal ear, stuff the mastoid cells, or break through a more or less disorganized ear-drum. As a rule, persons suffering with ear-ache need not be kept indoors except for a few hours, unless in bad weather. Moderate walking appears to lessen the pain, and seems, whether from the posture of the body or the influence of that form of locomotion upon the circulation in the head, to quicken the healthy process of resolution. Give the anodynes when the pain is severe, and encourage the sufferer to walk about slowly until a decided sleepiness is induced. But the principal object in this stage of the disease is to keep a free opening through an artificial drum opening, in order to allow of the escape of all inflammatory products. See the patient every five or six hours during the first two or three days; and whenever it appears that the opening has closed that has been previously made, repeat the paracentesis. If the opening previously made should be closed, if possible, pass your knife through it; but if that cannot be done, then make an incision through the lower part of the drum, below the malleus.

Morphia, chloral, and bromide of potassium, to relieve pain, often a large dose of bromide, with a hypodermic, will produce happy results. Some form of magnesia salts is, I think, an admirable laxative, or the bitter water alone, or with hot water, a gill or two of the former to a pint of the latter. Let the diet be nutritive, especially in the early part of the day; but as the pain occurs mostly at night, it is best not to fill the stomach at that time.

One cannot be too prompt in evacuating the middle ear when there is an inflammation of that

part. Delay is dangerous, and the paracentesis does no harm.

In measles and scarlet fever, examine the ears daily, and anticipate, if possible, the ulceration of a tympanic membrane, which so frequently occurs in the progress of these diseases. If the general practitioner would only examine daily the ears of those afflicted with scarlet fever or measles, and, finding them inflamed, treat them promptly, a great number of those obstinate or incurable otorrhœas and middle-ear troubles met with would be prevented.

No practitioner is really prepared to treat a case of scarlet fever or measles who is not able, at least, to recognize the drum-head when he sees it, and to perform the simple operation of paracentesis.

ON PAROXYSMAL FEVER—MOT MALARIAL.*

BY J. H. MUSSER, M. D.,

Physician in charge of the Medical Dispensary of the Hospital of the University of Pennsylvania; Pathologist to the Presbyterian Hospital.

That non-malarial intermitting fever is of frequent occurrence few will deny. Such cases have come to the writer's notice so often that, especially as but little can be found in reference to this subject in medical literature, arranged in a systematic manner, he has deemed it of the highest practical importance to record his observations, for the purpose of emphasizing the value of distinguishing these two forms of intermitting fever. In addition to the hurried narration of illustrative cases, a little time will be taken for the consideration of the mode of recognition of the many sources of origin of paroxysmal fever, and a moment given to the mechanism of fever. It will not be out of place, however, to make a brief reference to the writings of others in this connection, and first to that of the late Dr. Murchison.

In a most instructive clinical lecture,† he called attention to all the forms of paroxysmal fever, giving twelve varieties, viz. :

1. Malarious intermitting fever.
2. Certain cases of typhoid fever.
3. Certain cases of relapsing fever.
4. Pyæmia.
5. Fever from pent-up pus.
6. Fever from endocarditis, with or without embolism.
7. Tubercular fever.
8. Fever from lymphadenoma.

9. Syphilitic fever.

10. Urinary intermitting fever.

11. Hepatic intermitting fever.

12. Intermitting fever from morphia.

In addition to examples under each division, he pointed out the clinical features and points of distinction in such detail that it would be superogatory to enter upon such lines, save in the broadest manner, in this paper.

In the following pages, therefore, cases illustrating the second, fifth, sixth, seventh, and eleventh classes, respectively, of the above, will be recorded, and some new classes will be added, embracing cases of paroxysmal fever due to gastro-duodenal and pulmonary catarrh, to pent-up serum, to forming pus in a confined space.

Since this paper has been in preparation, a volume of the latest St. Thomas Hospital Reports (vol. xii., '81,) came into the writer's hands. Of the many able articles contained therein, there is one by Dr. Ord entitled, "On Some Cases of Pyrexia Simulating Ague." He records a case of ulcerative endocarditis, and one of jaundice with obstruction, attended by intermitting fever. Similar cases are detailed below, and hence it will not be necessary to more than refer to them. Cases III. and IV. of his list are very interesting, and worth repeating in abstract.

Case III. Female, æt. 58. Most of life in Mauritius. After returning to England suffered from what was called ague—shiverings, heats, and sweatings at irregular intervals. At first no pain, but finally increasingly severe pain, attended with vomiting, was felt in the left iliac region. The symptoms repeatedly recurred for months, and were regarded as outbreaks of latent ague acquired abroad. Treatment by quinia and arsenic. She finally, after a severe paroxysm, passed a stone the size of a bean from the bladder. Instant relief followed, and six months passed away (to time of writing) without any return of fever or sweating.

Case IV. is more remarkable, and for the possibility of its like appearing to us, it should be kept in mind.

Case IV. A man, æt. 30, never in the tropics, had daily attacks of high temperature, with shivering and sweating. He was sallow, worn, and emaciated. His liver was enlarged; his spleen not. He had syphilis. The fever would be reduced by quinia, but only for a time. Thirty grains of iodide of potassium daily cured him, the intermitting fever having been considered by Jenner, in consultation, a manifestation of syphilis.

I. The temperature curve of typhoid fever sim-

* Read before the Philadelphia County Medical Society.

† The causes of intermitting or paroxysmal pyrexia, and on the differential characters of its several varieties. *Lancet*, May 3, 1879.

ulates intermittent fever almost always at some period of its course. During the first week of the disease it is a difficult matter to decide whether a true intermittent is present or not, while in the decline of the disease a distinctly intermitting type is generally recognized. During the period of convalescence one must be watchful that the transient fever which so frequently develops, may not be considered malarial. The temperature during the course of typhoid fever, and the convalescence from it, is, as Dr. Cayley puts it, *labile*. It rises and falls with only the slightest provocation, and frequently takes on an intermitting type.

The following is a rare case of typhoid fever, in which the temperature at the height of the disease was distinctly intermitting. Dying the sixth day of observation, it was noted that four days before death the patient had daily a congestive chill, followed by a very high temperature. The temperature on the morning of the first chill was $101\frac{1}{2}^{\circ}$ (Fahr.); the evening, $104\frac{3}{8}^{\circ}$. The morning temperatures thereafter were, on the second, third, and fourth days, respectively, $96\frac{3}{8}^{\circ}$, $99\frac{3}{8}^{\circ}$, and $96\frac{1}{8}^{\circ}$, and on the corresponding evening hour $104\frac{3}{8}^{\circ}$, $105\frac{3}{8}^{\circ}$, and $106\frac{3}{8}^{\circ}$, the latter two hours prior to death. It was considered a case of congestive malarial fever. The autopsy revealed the lesions of typhoid fever about the twelfth day of the disease.

II. It is well known that the fever from pent-up pus is frequently, almost constantly, of an intermitting type. An empyema has frequently been overlooked on this account, but it has never fallen to the writer's lot to have a case that could not easily be recognized. It was different in other cases of deep abscesses, however, and notably in a case—the true nature of which, Murchison says, is almost always overlooked—a case of hepatic abscess.*

The patient, a male, thirty-nine years old, had lived on the Susquehanna, near Harrisburg, and had had chills and fever daily, three weeks prior to admission to the hospital. When admitted, he did not seem very sick; he had walked to the hospital, and was permitted to be up each day. He was slightly emaciated, and his liver was enlarged. He had daily paroxysms of fever, but the sweating stage continued all night, being more prolonged than in malarial intermittents. He died of hemorrhage from the bowels, one week after admission. The hemorrhage was found to be due to extensive ulceration of the large intestine, not suspected during life, on account of the occurrence of constipation. In addition, at the

autopsy, a large abscess in the right, and two small ones in the left lobe of the liver were found.

The following table exhibits the temperature record, and shows that we should have considered more seriously the low febrile range:

	A. M.	P. M.
October 9	99°	100°
" 10	99°	101°
" 11	99°	$102\frac{3}{8}^{\circ}$
" 12	99°	$101\frac{3}{8}^{\circ}$
" 13	99°	102°
" 14	$99\frac{3}{8}^{\circ}$	101°
" 15	$98\frac{3}{8}^{\circ}$	99°

The history of residence in a malarious locality, the temperature record, the absence of marked local symptoms and of intestinal disorders, favored malarial intermitting fever; the absence of enlarged spleen and the low temperature range negated that fever.

A child was seen with a history of daily febrile paroxysms, suspected to be malarial. The child had a severe paroxysmal cough, however, and was losing strength and flesh rapidly. An examination revealed the physical signs of circumscribed pulmonary consolidation, and the mother related the swallowing of a tack some time previous. Ten days afterwards, after a paroxysm of coughing, the tack and a large amount of pus were expectorated. The hectic soon lessened, the resulting cavity rapidly closed, and the patient's health was restored. Another example of deep-seated abscess.

Abscesses developing near mucous surfaces are oftentimes very puzzling, at least in their early period.

An abscess of the prostate gland, in a man 48 years old, was one of the most difficult to discern. The patient had been sick a week, and when seen by the writer was in the midst of a febrile paroxysm. He had marked gastro-intestinal derangement, with dry, brown tongue, extreme malaise, daily febrile paroxysms, preceded by chilliness, and followed by profuse sweats, which continued in the night; in addition, a dullness of intellect was observed. Six days after the first visit urinary tenesmus was noticed, subsequently rectal distress; an examination revealed a distinct prostatic abscess. It is of interest to note that fever did not occur after the abscess had fluctuated, and hence that the forming stage of an abscess sometimes is attended with paroxysmal fever. The following exhibits the evening rise and morning fall, taken on different days:

13, 4 p. m., .	$102\frac{3}{8}^{\circ}$.
14, 4 p. m., .	$99\frac{1}{8}^{\circ}$, cinch. anticipated.
15, 12 m., .	102° , cinch. in lessened doses.
16, 12 m., .	$98\frac{1}{2}^{\circ}$, cinch. in increased doses.

*Trans. Path. Soc., vol. viii.

17, 11 a. m., . 98°, cinch. in increased doses.
 18, 5 p. m., . 103°, cinch. in again lessened doses.
 19, 9 a. m., . 98½°, . 5 p. m., 103°.

A febrile paroxysm was not detected after the 20th, and the table shows that cinchona merely prevented the paroxysms, but did not control them. The case was certainly difficult to analyze. The absence of enlarged spleen, the return of the fever after discontinuing cinchona, and the exhaustive sweats, repulsed the idea of malaria. The appearance of the tongue, the malaise, the headache, and the dullness of mind, with the fever range, made one consider typhoid rather seriously. On the sixth day (19th) after my first visit, the local symptoms defined the lesion. The febrile action then ceased, but the local inflammatory condition continued. It would probably explain the cessation of fever with complete suppuration to say that the soft tumor was not so much an irritant as the hard mass prior to pus formation.

(To be Continued.)

FACIAL ERYSIPELAS IN A PREGNANT WOMAN; RECOVERY.*

BY I. C. HAZLETT, M. D.,
 Of Belle Vernon, Pa.

I was called March 1, 1884, to see Mrs. S—, aged thirty-eight years, mother of eight children, from whom the following history was obtained:

On Thursday night, February 28, she noticed, on retiring, a slight sore on septum of nose.

Friday morning, February 29. Soreness a little increased, and a slight blush extending from sore to cheek, with some puffiness of the face during the day.

Saturday, March 1. Saw her at noon; found the face much swollen and inflamed; both eyes nearly shut; nose swollen entirely out of shape; tongue heavily coated; throbbing headache; temperature, 101° F.; pulse, 100.

My diagnosis was facial erysipelas, and on inquiry learned she had been enjoying the best of health, was well nourished, the bowels had been regular and free; but on further inquiry, she told me she expected to be confined in about two weeks.

Having always been taught to keep away from puerperal patients while attending erysipelatosus ones, those of you who have had the trial can judge of my feelings to find erysipelas in a puerperal woman. Gave her quinia sulph., gr. iv.,

every four hours; alternating with tr. ferri chlor., gtt. x., every four hours. Also, tr. aconite, fl. ext. belladonna, āā gtt. j., every hour in teaspoonful of cold water; the room to be kept quiet and at as even temperature as possible.

Sunday, March 2. Was called about 3 a. m., and told Mrs. S. was in labor. On my arrival, found the babe, a good-sized boy, had been born about one hour, but the secundines were still retained, and that rather a free, but not alarming, hemorrhage had taken place. I at once removed placenta, together with all soiled clothing, from the bed and from the room; found temperature normal, pulse 100, patient free from pain and resting easy.

Had the children's bed removed from the room, ordered all persons to be kept out of room except nurses, room to be well ventilated and still kept at an even temperature; all napkins used by my patient to be saturated with a 10 per cent. solution of carbolic acid, to be frequently changed, and to be removed from the room as soon as soiled. Continued the same treatment as the day before. Saw my patient at 5 p. m. Temperature 101½, pulse 100, appetite good. Continued quinia sulph. gr. iv. every four hours, tr. ferri chlor. gtt. x. every eight hours, alternating with potassic iodide gr. v. every eight hours. Continued aconite and belladonna every hour or two.

Monday, March 3, 7 o'clock a. m. Temperature 101½, pulse 100. Continued treatment of the day before, and saw her again at 5 o'clock p. m., and found temperature 102½, pulse 100, appetite good, swelling and flush beginning to fade and pass away.

Tuesday, March 4, 11 o'clock a. m. Temperature 102½, pulse 96. Erysipelas faded and the swelling leaving the face. Bowels opened freely, appetite good.

Saw my patient again at 5 p. m. Temperature, 104½°; pulse, 86; appetite good, but complains a little of dryness of the throat.

March 5, 9 o'clock a. m. Temperature, 99½°; pulse, 80. Erysipelas entirely gone; throat still dry; pupils a little dilated.

At this time, Dr. W., from Johnstown, Pa., a brother of my patient, saw the case with me. We stopped all active treatment and gave quinia sulph., gr. iv., every six hours, alternating with tr. ferri chloridi, gtt. x., every six hours, together with good, nourishing, easily-digested food.

At this time my patient began to talk a little incoherently, but was not stupid, and recognized any one on going to her bed.

Saw her again at 5 o'clock p. m. Temperature

*Read before the Fayette County Medical, Society.

99 $\frac{1}{2}$ °; pulse, 80; mouth still dry; inclines to talk, also to look and listen as if for some one calling; then will speak to some imaginary person on the bed or at the foot of the bed, or call to some of her children that are in danger, or in mischief, sometimes kindly, but generally in great earnest.

Thursday, March 6. Was called at 5 o'clock a. m., and told my patient was much worse. On my arrival, found temperature normal; pulse normal, but very restless and wild; had put in a fearful night, raving, crying, scolding, and pleading to be taken home. Her night clothes and underclothes, together with the sheet, were completely saturated with perspiration. She had passed no urine, but no accumulation could be detected. Gave potassic bromide, gr. xv., chloral hyd., gr. v., every half hour until sleep was produced. Stopped all other medicines; gave milk as often as I could get her to take it.

Six o'clock p. m. Temperature 97° F., pulse 76; has taken potassic brom. $\mathfrak{z}$ ij., chloral hyd. $\mathfrak{z}$ i. during the day, but no signs of sleep. Has taken no food in the last twenty-four hours, except milk, and says she will not eat any more until taken home. Is very wild, talks incessantly to imaginary persons about her, and frequently speaks of explosions that are taking place, even brushing the dirt from the bed-covers as it falls about her. Does not recognize any one on going to her bed, except her father, who came to see her at this time. No urine passed during the day, and much against my patient's will, with the assistance of four women, I used the catheter and drew off about thirty ounces of not unhealthy looking urine. Continued chloral and brom., and to each dose added about $\frac{1}{2}$ gr. morph. sulph., staying with my patient until three doses were given, watching the effect. At this time she ceased to talk so much, and would lie still for a few minutes at a time. Left a few morphia powders with directions to give her one every hour, with a dose of a mixture of chloral and brom. until she slept, then stop morph. and give mixture alone when she would awaken. At 10 o'clock, p. m. she slept, and continued to sleep most of the time until morning.

Friday, March 7, 8 o'clock a. m. Found her at home, calm and in her right mind, but extremely weak. At this time met Dr. W., from Mount Pleasant, Pa., another brother of my patient. We stopped all medicine, gave beef tea freely, milk without limit, small quantities of brandy and milk and egg-nog, carefully administered as the pulse and other circumstances would admit.

From this time my patient rallied without one unfavorable symptom, and when last I saw her, March 24, she was able to take her place at the table in good health.

What was the *cause* and *nature* of this aberration; there being neither quickened pulse nor heat of skin or head?

HOSPITAL REPORTS.

A CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

BY WILLIAM GOODSELL, M. D.,

Professor of Gynecology in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

Uterine Disease and Nervous Exhaustion—Vesico-Vaginal Fistula, Laceration of the Cervix and Perineum; Operations; Cure—Causation of Laceration of the Cervix and Perineum.

GENTLEMEN: The first patient who comes before us to-day is one for diagnosis. She states that she is thirty-two years of age, has been married thirteen years, and has had but one child, which is twelve years of age. She says that she has not used any means to prevent conception, nor has her husband. There must be some reason why she has been sterile for twelve years. She states that the labor was not very difficult, but I see from the notes of her case taken at the Dispensary that she has had a rupture of the perineum, which was operated on at another institution. This was done five years ago. At that time, she had a dragging sensation in the pelvis, and a bearing-down feeling as though something were coming out. She had backache and headache, and wakefulness. She also had leucorrhœa, but no trouble in micturition. She derived very little benefit from the operation, the symptoms remaining the same. The menses are intermittent; they come on, last a day and night, then disappear for the same length of time; again return and continue for a week. She does not lose an excessive amount of blood. Her face is haggard, and she tells me that for a number of years there has been more or less worry and difficulty in trying to make both ends meet. She dates the dragging sensations from her labor.

It is not easy to say whether these symptoms are due to genital lesions or to nerve-exhaustion. I honestly believe that the influence of the womb in producing the so-called uterine symptoms is very much overrated. When a woman is out of health and consequently with lax fibre, she will complain of pain in the back, and dragging sensations which have no connection with uterine trouble. Virgins, who have no laceration of the perineum, and in whom the parts are contracted, will complain of these pains, when their health is undermined by hard study or by any other kind of nerve strain. Men may have a pain in the back when worn out by mental or by physical exertion, but especially by the former.

If the symptoms in this woman were dependent on the laceration of the perineum, it is difficult to see why she was not and is not benefited by the operation; but this is the history of many of the operations performed on the uterine organs. Take, for instance, laceration of the cervix. You discover this lesion in a woman who complains of dragging pain, of headache, spineache, and backache, of irritable bladder, leucorrhœa, and wakefulness, and of cold hands and feet, and you will very likely attribute all these symptoms to the uterine lesion. If you assure her positively that by an operation you can cure her, you will often make a great blunder, for these symptoms do not always, do not in the majority of cases, depend upon the lesion, or on other uterine lesions. They are tokens of nerve-exhaustion, as well. This overrating of the womb, as a cause of disease, is, in my opinion, the great error of the day. On the other hand, a woman may have a laceration of the cervix, and yet, while she is suckling her child, she may not suffer from the lesion; but when menstruation returns, the presence of this injury invites too much blood to the womb and its annexes, and we have the symptoms of bearing down and the like, from irritation and overweight of these organs. The same thing happens from nerve-exhaustion. A woman suffering from this condition will have bad headaches and nape-aches. What is the meaning of these aches? They indicate disturbances in the circulation of the blood in the brain, too much or too little being present. So it is with the back-aches and spine-aches, which in a large number of cases are due to passive congestion of the spinal cord. All the pelvic organs, which are the exacting organs during woman's menstrual life, will receive too much blood because of a lack of coördinating power in the nervous system. The ovaries and womb become enlarged and painful, the womb sometimes measuring as much as three inches in virgins. It is not always easy to decide what rôle is played by the uterine lesions and what by the nerve-lesions; but the womb being see-able and touch-able, we make it the scape-goat. Let me repeat again, that the burning error of the day is the attributing to the womb symptoms which are due to nerve-exhaustion. Consequence is mistaken for causation.

I have not yet examined this woman, but my inference is, from the fact that the operation was of so little benefit, that there must have been something in addition to the ruptured perineum. In weak women a labor may produce sufficient shock to be followed by nerve-prostration. When I first saw this woman I was struck with her appearance; for although she is but thirty-two years old, she shows the lines and furrows of suffering, and that of a mental character.

Making a vaginal examination, I find one cause of the bearing-down feeling. The womb is retroverted and prolapsed. The perineum which has been formed is only a skin-perineum. Let me dwell upon this point for a minute. All beginners, in performing operations, are afraid of the knife, and they cut too little. In operating for lacerated perineum, I never denude less than one inch in width, oftener more. If too much be removed, the surfaces cannot be brought together. This perineum is a membranous one, and does not

slope up like the breast of a dam, as it ought to. It should be thick in front and gradually slope inwards. I do not say that in this instance the insufficient perineum is attributable to any fault in the operation. I have, even after great care in denuding a large surface, occasionally been vexed to find the perineum not as thick as I had wished and expected. Sometimes nature will make a membranous perineum. During labor, the perineal centre and muscles may be torn, while the skin from its elasticity may remain intact. Then we are obliged to operate precisely as in cases in which the perineum is completely torn. When the womb is so low as this, the ovaries are liable to be prolapsed, and on the left side I feel one which appears to have undergone cystic degeneration. I cannot feel the right ovary. The womb measures plus 3 inches, and there is a slight laceration of the cervix.

I am disposed to think that if we can relieve the local trouble, she will recover only in a measure from the nervous symptoms. Sometimes in cases of nerve-exhaustion, with local troubles as in this patient, although you put in a pessary which keeps the womb in a proper position, the woman will feel no better, unless, perhaps, she may be able to walk better, showing that there is a something behind the merely local trouble. This patient says that she cannot wear a pessary. The proper mode of treating a case of this kind in private practice would be by the use of large douches of very hot water—not a small injection, for this would do more harm than good. One or two gallons should be used. Most of the patients who come to the hospital are too poor to use these injections, because it requires an attendant, an expense which they cannot afford. The way in which these large injections do good is by constringing the capillaries of the part. The first effect of hot water is to invite blood to the part, but the secondary effect is to contract the vessels, and thereby lessen the amount of blood in the part. If the object is simply to cleanse the vagina, you should order a quart of water warm enough to be comfortable; but if you wish the therapeutic action, you should use one or two gallons as hot as can be borne, usually at a temperature of from 110° to 115°; sometimes a temperature of 120° can be borne, if the nozzle of the injection-tube be made of rubber.

If the patient cannot use the injections, the next best thing is to use anodynes in the vagina. I generally order the following:

R. Morphine sulph.	gr. ss.
Extracti belladonnæ,	gr. ij.
Olei theobromæ,	q. s.
M. Et ft. vag. suppository No. 1.	

Sig.—To be used at bed-time.

In this case, however, I shall use iodoform, ordering a vaginal suppository containing 5 grains, to be slipped into the vagina, after she goes to bed at night, and the application of a guard to prevent the escape of the melted suppository.

I shall also order my favorite mixture:

R. Ammonii chloridi,	
Ammonii bromidi,	āā ʒiv.
Infus. gentianæ comp.,	ʒvi. Solve.

Sig.—A dessert-spoonful before each meal.

If the ammonium chloride disagrees with the

stomach, the dose will be reduced. This is one of the best remedies which we have for glandular enlargements. To it I may add digitalis in full doses.

How shall we support the womb? In private practice, I should use an inflated ring pessary. This is expensive and very perishable. I have seen them wholly collapse in two weeks; and being made of soft rubber, they make a very offensive smell; and in addition there is a scientific objection which applies to all ring pessaries, and that is that they act not by elongating the vagina, but by widening it. A good plan in the present case would be to use oakum, placing a little pad in front of the cervix and one behind it, and then a pad in front of the cervix to retain the others in position. Oakum has two advantages; it contains a great deal of tar, and is therefore a disinfectant, and does not readily decompose, and being covered with tar, there is not much tendency to absorb moisture, and it therefore retains its elasticity. If cotton is employed, it should not be the absorbent variety, but ordinary raw cotton which contains a considerable amount of grease, and does not on that account take up the moisture.

Vesico-vaginal Fistula, Laceration of the Cervix and Perineum: Three Operations, All Successful.

This patient is one on whom I have performed three operations. The first was for vesico-vaginal fistula, which has been cured; the second was for lacerated cervix, which was also successful, and the third was for lacerated perineum, which, as you see, is restored. I think that I made a mistake in not sending her home after the second operation, in order that she might recuperate. She did not bear the operation very well; the stitches cut a great deal; but still perfect union has taken place. The tear of the perineum had gone through the sphincter, and the rectum and vagina were converted into one large opening. The operation was done two weeks ago. At bedtime, on the ninth day after the operation, a clyster, consisting of one ounce of glycerine and two ounces of sweet oil, was introduced into the rectum, and two Lady Webster and two compound cathartic pills were taken. The object of the glycerine was to dissolve the hard masses in the rectum. The bowels were moved without any trouble, there being no scybalous masses passed. In every case in which I have used this injection it has acted very satisfactorily.

The difficulty in this perineal operation, when the anus has been torn, is not in restoring the sphincter muscle, but in the liability to non-union above it, causing a recto-vaginal fistula. This is liable to occur if the stitches are left in too long. In a recent operation of this kind, I had a recto-vaginal fistula left after the rest of the wound had healed. At the end of two weeks, after the union was sufficiently strong, I introduced a rectal speculum, and made applications of nitric acid to the whole track of the fistula. Between these applications nitrate of silver was used—first the solid stick, then a strong solution, and in two weeks the fistula was closed.

Laceration of the Cervix and Perineum. Caustion.

This is the first time that I have seen this patient. She is 31 years of age, married, and has

four children, the youngest of which is two years old. She has pains in the head and in the stomach, and suffers from cold hands and feet, and has to pass her water frequently.

Let us see what can be elicited by a vaginal examination. The first thing I detect is that the perineum is torn down to the sphincter. The cervix also is torn, and on the right side. In one of her labors the head was probably in the right occipito-posterior position, but she says that instruments were never used in any of them.

Tears of the perineum will occur whether the physician uses the forceps or not, but in the majority of cases they come from the use of the forceps, or rather, from my point of view, from the abuse of the forceps. Let me give a piece of advice to you as young men. When the proper time comes, put on the forceps and boldly bring down the head secundum artem; but when that head begins to bulge the perineum, take off the forceps. I do not think any of you are competent to deliver the head over the perineum with forceps. The temptation is to turn the head out too quickly. If you take off the forceps, as I have suggested, you will rarely have a bad tear of the perineum; and if a tear occurs you will not get the blame of it. It is a very rare thing for me to end a labor with the forceps on. When the perineum begins to bulge, I support the handles to see whether the pains are strong enough to end the labor. If so, I remove the forceps.

As I have said, I think that the tear of the cervix was produced by the head coming down in the occipito-posterior position. Perhaps the occiput did not rotate anteriorly. This would be very apt to cause the tear of the perineum. Under such circumstances, the physician would be justified in keeping on the forceps, because he can by forcing flexion lift the head over the perineum, and, to a certain extent, prevent laceration. In such a case, you would be warranted in delivering with the forceps. But these cases are very rare. I have seen but one.

This is a case for operation, and perhaps next week I shall restore the cervix, and a week or two later operate on the ruptured perineum.

Let me now say a few more words in reference to the use of the forceps. There is such an abuse of this instrument that I sometimes think that Baudelocque was right when he said that the forceps had done more harm than good. It requires great skill and judgment to end a labor with forceps. A physician from inexperience, or being demoralized by a long and tedious labor, is liable to use undue violence and deliver the head too quickly or to make traction in the wrong direction. I have myself torn the perineum, and have seen many good physicians do the same. From this experience, I should recommend that unless there be an excellent reason for contrary action, the forceps be taken off when the head reaches the perineum. Occasionally one blade of the forceps will catch over an ear and you cannot get it off, but in the majority of cases they can be removed, and this is the proper thing to do.

Once in a while, a bad tear of the perineum will be produced in a breech case, because the physician forgets the curve of carus. He does not carry the body upwards as he should do, and the

chin catching on the perineum, tears it; but in nine out of every ten cases, a bad tear of the perineum is, in our experience, here due to the forceps.

A number of years ago I was called to assist a physician who had a large obstetric experience. He had become completely demoralized over a tedious labor. He had put the forceps on and had got through the worst of it when he gave out and had to send for assistance. I then took hold, and after bringing the head down to the perineum, handed the forceps to the physician to complete the labor, so as not to take the wind out of his sails. He at once turned the head out, and I felt sure that something must have given way. After the placenta was delivered, he went to wash his hands, and while he was doing so, I took the opportunity of examining, and found the perineum torn down into the rectum. I asked him to examine the parts. He put his finger in the vagina, and said: "Oh, yes! the placenta has been taken away; everything is right." I then called his attention to the rupture of the perineum, and a look of blank astonishment came over his face. Neither of us had a needle. So we borrowed a darning-needle and sewed up the parts with stout linen thread. The union was perfect. I have seen the same thing happen in other cases to which I had been called, and, in my younger days, I have done it myself.

Suppose you do meet with this accident, what is to be done? I say, first discover it. In many instances, even of complete tear, the lesion has not been detected until the patient has had her bowels moved. This is inexcusable carelessness, of which you must never be guilty. After every labor you should pass your finger into the rectum and the thumb into the vagina and gauge the depth of the perineum. If you are not sure, decently make an ocular examination of the parts. A tear is discovered, introduce stitches there and then, and in the majority of cases perfect union will result. It is not usually necessary to put the patient under ether, for the parts are benumbed by the excessive stretching to which they have been subjected. Pain is experienced only during the puncture of the skin; therefore, this should be done quickly. You should always be prepared for such an emergency, and always carry a perineal needle and a supply of silver wire. Shot are not necessary, as twisting answers every purpose. I can say one thing for your comfort, and that is, that a tear which looks very large will be reduced fully one-half when the parts have contracted to their normal condition.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Discussion on Inflammation of the Ear.

(See page 733.)

Dr. C. H. Burnett, in opening the discussion by request of the chair, said: It is very important to find out the real cause of pain and inflammation in the ear. Very often it is due simply to a closure of the Eustachian tube and not to inflammation in the tympanic cavity, or it may be due to an inflammation in the membrana flaccida, or

Shrapnell's membrane, in the upper part of the membrana tympani, the latter being unaffected. In the former instance the membrana tympani is drawn inward by the vacuum formed in the middle ear by the closure of the Eustachian tube, the ossicles are forced inward, pressure is exerted on the contents of the labyrinth, the filaments of the auditory nerve in the semi-circular canals are compressed, and reflex irritation of the cerebellum, with vertiginous symptoms, result.

Inflation will remove in many cases the pain in the ear and other symptoms, without the resort to leeches or paracentesis.

The surgeon should not be swift to incise the membrana tympani, especially simply to relieve pain in the ear. The membrane should be incised only when it bulges in consequence of fluid accumulations within the tympanic cavity. If an acute inflammation exists in the membrana flaccida, causing pain, this part of the membrana tympani may be incised with great advantage. Repeated incisions in the membrana tympani, especially in acute cases, for the relief of pain, are rarely, if ever, demanded. When suppuration and discharge have been fully established, cleansing by the use of absorbent cotton on the cotton-holder and the use of powdered boric acid, either pure or in combination with resorcin or chinoline salicylate—*i. e.*, the dry treatment—will be found more efficient than the use of the syringe or astringent drops.

Recurring again to acute cases of inflammation in the ear and earache in children, I would recommend a sudorific and anodyne treatment, with the administration of aconite in proper doses, as preferable to depletion or scarification about the ear. The child should be, of course, carefully housed during the acute and painful stages of the disease. The surgeon should bear in mind that when called to see a child or any one affected with an acute inflammation in the ear, that domestic remedies may have been used, and have aggravated and masked the disease. Very often the ear-pain may be relieved by simply washing from the auditory canal various irritant salves, and a host of pungent domestic remedies, which would be enough to make a well ear ache.

Dry heat is the best remedy in the early stages of many cases of otitis, and its application will often bring about a resolution of acute congestion in children or adults. In fact, at the outset mild remedies or nothing should be applied to an ear acutely inflamed, whether the seat of the disease be in the external canal, the drum-membrane, or the drum-cavity.

If a furuncle be diagnosed in the auditory canal, it should be incised at once. This usually obviates the necessity of all forms of poulticing, and prevents the tendency to the formation of other boils by cutting short the congestion in the skin of the canal.

Dr. Lawrence Turnbull: "I cannot but express my pleasure at the way the subject has been brought before us, namely, the hygienic importance of the subject. Most of you are aware of the publication of my little work on this subject, and of the proposition which will be found in it worded as follows: 'Of all the injurious influences combined, none, however, are so hurtful to the integrity of the human ear as cold.'

"All the main propositions which the gentleman has put forth in his essay I approve of; but I would make this reservation, that it is always a difficult matter to determine whether we have a true catarrhal inflammation of the middle ear to treat, or a purulent one, so frequently do the symptoms run together and become mixed. In the ordinary or simple form of catarrhal inflammation of the middle ear, you will have a rapid development of acute inflammation, with pain, heat, swelling, and redness, and in from twenty-four to forty-eight hours a sudden giving way of the drum-membrane, followed by a discharge of mucus not mixed with fully-developed pus, and the child almost always soon recovers from it.

"In the second form you have an acute inflammation which involves the deep-seated tissues, blood-vessels, etc., and if not checked promptly will ultimately destroy the membrana tympani, and may involve the bone or brain itself, with profuse discharge, for days, weeks, or even months, of pus, blood, and broken-down tissue and bone. Now, I consider that the most important treatment is to relieve pain, and I find in little children with their distressing cries which appeal to every one's heart, that nothing is so good in the early stage as to apply a bag of hot salt or sand, and covering it with a piece of flannel, place the patient's ear over it, or applying by binding it to the ear, as the little one is very restless and tosses about. If there is no hope of the resolution of the inflammation, then moist heat should be applied by means of a large hop poultice covered with oil silk, and renewed when it becomes cool. After using all the ordinary means to prevent and control inflammation, and none are of so much importance as those which afford relief to pain and quiet the excited nervous system, I administer to children the syrup of chloral with bromide of potassium, or in place of the chloral the camphorated tincture of opium; while to the adult I find nothing so prompt to relieve the agonizing pain as morphia sulphat. and atropia sulphat., the first in doses of $\frac{1}{12}$ to $\frac{1}{8}$ of a grain, and the latter in $\frac{1}{15}$ of a grain to $\frac{1}{10}$, combined with a minute portion of the sulphate of iodine in solution, and administered hypodermically. Some good authorities, like Politzer, prefer to give the morphia in $\frac{1}{3}$ of a grain at night and repeated; but in many instances we have found it rejected by the stomach. If we have not been successful in checking the disease, and we find that the inflammation is followed by perforation, we have then purulent otorrhœa, which, if not checked, may involve the posterior membrane, and at times the mastoid process and cells, and if there is great dizziness present, the labyrinth is apt to be involved. A case of the first kind, abscess, in the posterior fold or Shrapnell's membrane, of the drum-membrane, I opened an abscess this day from a neglected catarrhal inflammation, with prompt relief to the tumulus. Again, we have a sub-acute inflammation of the middle ear, but no perforation or severe inflammation of the posterior surface of the drum-membrane: an effusion of blood or serum takes place, which, owing to the transparency of the membrane, can be seen as a yellow reflex with a dark hair-like line. This dropsy is to be treated by the use of the inflator of Politzer, the nozzle being carefully introduced

into the nose, a little water in the mouth, and with head carried forward and to one side, so as to facilitate the passage of the fluid contents into the pharynx; the patient swallows, and the air is propelled into the middle ear, and, if successful, the bubbles of fluid can be seen behind the surface of the drum-membrane.

"Some physicians resort to paracentesis, even when the Eustachian tube can be opened by the air-bag. Now, I am one of those who consider this operation a very simple one, and any physician can perform it if there is a good, large, not swollen meatus, and a speculum, good light, and forehead mirror; yet my experience is against its frequent performance in inflammation of the middle ear, as it often destroys the membrane entirely, or leaves a persistent and troublesome otorrhœa or chronic suppuration of the middle ear in scrofulous, tuberculous, or nervous patients.

"I have also noticed bad results follow the use of local depletion in this same class of patients by leeches or cups.

"But I approve of and perform paracentesis, and recommend it in healthy children and adults, when from the appearance of the membrana tympani there are sure indications that perforation is about to occur, when there is a yellowish green discoloration of the membrane, with bulging forwards, with a livid red swelling and intense pain radiating all over the side of the head and face."

Dr. G. G. Davis: "I am surprised that in this discussion the use of hot water has not been advocated more strongly. A quart of water allowed to run into the ear from a nasal douche will usually be sufficient. It is a plan recommended by Roosa in his treatise on diseases of the ear, and is one that I have tried with satisfaction. It is usually all that will be required for most of the milder cases and many of the severer ones. I think it should, usually, be tried before resorting to the severer procedures of leeching and puncture of the membrane."

Dr. Heyl: "The reference which was made by Dr. Burnett, in the opening remarks, to a class of middle-ear affections which, though in many features suggesting acute catarrh of the tympanic cavity, are really pneumatic disturbances, as illustrated by a case which I have now under treatment. Some two weeks since I was sent for by a gentleman in the upper part of the city, with the request to bring instruments for cleansing his ear, as he was sensible of great pressure upon the drum-head which, perhaps, might be due to wax. He gave me the following history: Several days previous to my visit, he had noticed on retiring to bed a sticking sensation in the ear; during the night this increased to a violent pain. In the morning he began to hawk and spit mucus or mucus-pus mixed with blood. After two or three days, on attempting to rise from bed and walk, he was obliged to vomit freely; this was apparently due to the effort of walking or maintaining the upright position. About this time I saw him. I found the pain much lessened, but a great sensation of pressure in the ear; hearing dull, noticeably so to the patient, who says that it has always been acute. Watch, $\frac{3}{4}$ ". Examination of the drum showed some injection along the malleus handle and membrana flaccida. Membrana tympani lus-

treless. Relief experienced from cautious inflation with the Politzer method. Under appropriate treatment the patient is progressing toward recovery. Now, what was the diagnosis of this case? At first I was inclined to think it was a case of catarrhal tympanitis, and rather expected to see perforation take place with the formation of pus. But on observing the progress of the case, I came to the conclusion that the real difficulty was about the pharyngeal orifice of the tube, which so affected the muscular arrangements of the ossicles as to interfere with the normal pneumatic condition of the middle ear, which I believe depends in a measure on the proper action of these muscles—at least those connected with the palate and Eustachian tube. I may simply refer to two other symptoms which this case presented.

"1. A difficulty of maintaining equilibrium; a sensation as if walking on a rocking boat, and the disposition to vomit which accompanied it. This, doubtless, was referable to the semi-circular canals, but a curious feature was that it was very much aggravated by the vibrations of the tuning fork placed on the mastoid. This effect of the tuning fork probably often occurs in middle-ear troubles, although I do not remember to have seen it so marked as in this case. It suggests the thought of the susceptibility of the nervous connections of the semi-circular canals to sound-waves.

"2. There were slight psychical symptoms in this case, such as great indisposition for work, or conversing with any one; a sense of uncertainty about the ability to perform work; a sense of mental instability. Careful observation will probably show that a very close connection exists between abnormal mental symptoms and abnormal intra-aural conditions."

Dr. Risley: "I feel indebted to the lecturer for calling forth a discussion on this very practical theme. Any scheme looking toward the hardening of one's self against cold-taking, should be very carefully scrutinized before its adoption. Regarding the operation for paracentesis of the drum-head, I think its importance has not been set forth with sufficient emphasis in the paper of the evening. I agree fully with Dr. Burnett in the views he has expressed regarding the rare necessity for its repetition.

"In the treatment of acute catarrh of the middle ear, strict regard should be paid to the stage of the disease. At the beginning of the acute inflammation, the general treatment is of great value, and he regarded tinct. of aconite, syr. of ipecac, spts. ætheris nit., etc., quite as important here as though the inflammation had attacked the mucous membrane elsewhere, *e. g.*, the bronchi. The aconite is an especially valuable adjunct to the local treatment employed.

"To guard the patient from all exposure is quite as important for the successful treatment of a severe acute catarrh, involving the Eustachian tube and tympanum, as in the treatment of a bronchitis or pneumonia; confinement to bed between woolen blankets should in bad cases be rigidly insisted upon. The local treatment is of great value, but must be directed with due regard for the stage of inflammation and its severity.

"In mild cases, freedom from exposure and an aconite mixture, with a little ipecac, will be quite sufficient, if the nasal passages and pharynx are

kept free. If the attack is more severe, showing marked swelling of the mucous membrane of the pharynx and nose, and is attended with pain, the efforts for relief from the intense suffering are first in demand.

"One of the simplest methods for relieving the pain—one always at hand, and in his experience one of the most effective—is the application of hot water applied to the external meatus. It must, however, be *hot*. It need not be applied forcibly or in large quantities. To pour the water in from an ordinary *pipette*, the head being held well over to the opposite side, is usually quite sufficient. The temperature of the water must be kept up by frequent repetition of the process, until the pain is relieved, which very soon results if the plan is to be successful. It, however, in some instances, seemed to aggravate the suffering of the patient. If relief does not follow the thorough application of the hot water, the leeches are applied in front of the tragus, as recommended by Dr. Burnett. If the inflammatory process is not arrested, there soon follows, especially in badly nourished or feeble persons, a stopping of the middle ear with mucus and exudates, with great aggravation of the patient's suffering. It is at this stage of the disease that paracentesis is usually beneficial, and very frequently urgently demanded.

"The appearances of the drum-head under these circumstances, the results of paracentesis and the usual features of this disease, I will illustrate in the case of a little girl nine years old—at the present time under treatment, but convalescing from a violent attack of acute catarrh of the middle ear, Eustachian tube, pharynx, and nasal passages. She was at the time under treatment for a subacute attack, which had caused tinnitus and some hardness of hearing. She had the day and evening before the attack gone through the excitement, fatigue, and possibly exposure, incident to a birthday party. In the night severe pain came on in the right ear, and the nose was stopped by an acute coryza. Sweet oil and laudanum were poured into the meatus, but without relief. The following day was stormy, so that she was not brought for advice until the third day, and was then found still suffering so greatly that she was crying with pain. The meatus was very tender, so that traction upon the auricle aggravated the pain. The membrane of the tympanum was a brownish red or copper color, and the superior posterior quadrant was bulging outward and downward; at the center of this almost bagging part of the membrane was a yellowish red point. I did not hesitate to perforate the drum-head at this point, and a moment later with the air-bag was able to force through the incision a few drops of a nearly chocolate-colored serum. The pain was relieved immediately. The meatus was greatly cleansed, a wick of borated cotton, saturated with a solution of atropia sulph., placed in contact with the drum-head, and allowed to remain, the pharynx and nasal passages washed with a weak solution of sulphate of zinc, and the child sent home, with instructions that she be placed in bed and the aconite mixture given if she should be feverish in the evening.

"The following day she was seen at her home; there had been no return of the pain; in forty-eight hours the wound in the tympanum was

closed; and at the end of the week she was quite recovered, even of the subacute catarrh, for which she had been under treatment before the violent onset of the acute inflammation.

"A thorough and careful attention to the coryza, which very usually precedes these inflammations of the middle ear, would prevent their occurrence in most cases."

Dr. F. J. Buck: "I have often relieved severe ear-ache almost instantly by placing some loose cotton in the bowl of a pipe; then moisten the cotton with sulphuric ether, and blow the vapor into the ear through the pipe-stem."

Dr. Wm. T. Taylor: "To relieve the ear-ache of children, I have used chloroform in a similar manner to that described by Dr. Buck."

Dr. Wm. S. Little: "It would be difficult to lay down any rule that would apply to all cases in the process of hardening the system so as to prevent catching cold. The sensibility of the skin varies so in individual cases, the effect of heat and cold, the action of irritants upon the

skin, producing different results in individual cases; the Turkish and Russian bath not being allowable in many cases.

"The hardening of the system by exposure has been advocated by non-medical men who have been close students of nature, but the *genus homo* does not thrive as other *genera* do in undergoing the process.

"The treatment of ear affection following catching cold is often rendered more easy, in addition to the methods already discussed by the author of the paper, and gentlemen following in the discussion, by inhaling medicated vapors; compound tincture of benzoin in boiling water being a very agreeable and soothing medication.

"The inhalation of burnt brown sugar is a very homely but very valuable method, several cases of severe catarrhal conditions of the throat and ear being cured by persons who had resorted to various plans of medication prior to their working in the refining room of a sugar factory."

EDITORIAL DEPARTMENT.

PERISCOPE.

The Treatment of Hay Fever.

Dr. Morell Mackenzie publishes a lecture on "Hay Fever" in the *Brit. Med. Jour.*, May 19, 1884, from which we extract the following:

The treatment of hay fever is by no means satisfactory, and in no disease is the old adage, that "prevention is better than cure," more truly applicable than in the case of this complaint. If the poison be continually introduced into the system, the antidote, if one exists, can have but little chance of effecting a cure. The first measure, therefore, must be to remove the patient from a district in which there is much flowering grass. A sea-voyage is probably the most perfectly satisfactory step that can be taken. Patients who are unable to go to sea should endeavor to reside on the coast, where they will generally be free from their troublesome complaint, except when land-breezes blow. Dwellers in towns should avoid the country, and those who reside in the country should make a temporary stay in the centre of a large town. It often happens, however, that such a change of abode is not practicable; and, under such circumstances, if the complaint be very severe, the patient should, if possible, remain indoors during the whole of the hay season. Many persons, of course, cannot keep in the house during the month or six weeks of the hay-fever period; and those who can, are apt to find such detention not only exceedingly irksome, but very injurious to the general health. If, therefore, a patient be obliged to go out of doors, he should plug his nostrils with cotton-wool or wadding, by means of one of Gottstein's screws, and should defend his eyes by wearing spectacles with large frames, accurately adapted to the circumference of the orbits. Plugging the lachrymal ducts with

small glass rods has also been recommended,* and Thorowgood speaks † favorably of a little apparatus containing a few drops of a camphorated or carbolized solution, which can be comfortably worn in the nostrils. Instead of *plugging* the nose, it has been advised‡ to close it by compression with a little metal clip. As rapid motion in the open air almost always aggravates the complaint, it may be advantageous to wear a veil over the face whilst driving. One made of "three ply" of fine silk gauze has been found very useful.¶ It is recommended that it should be made in the form of a bag open at both ends, one end fitting round the hat, whilst the other has attached to it a heavy wire ring about ten inches in diameter, which lies on the shoulders and keeps the veil off the face. Those who do not mind being occasionally mistaken for the "veiled prophet of Khorasan," will no doubt adopt this plan. Protected in this way, many people predisposed to hay fever escape altogether, whilst others contract the affection in a very mild form.

As the disease most commonly occurs in persons of nervous temperament, nerve-tonics and other constitutional remedies have been used for the purpose of warding off hay-fever, or controlling the violence of its attacks. Amongst these, quinine, arsenic, opium, and belladonna have been employed; but I have found valerianate of zinc, in combination with assafetida, more valuable than any other drug. I usually give the remedy in the form of pills containing one grain of valerianate of zinc, and two grains of the compound assafetida pill, doubling the dose at the end of ten days or a fortnight. I direct my patients to be-

* Hannay: *British Medical Journal*, 1881, vol. ii., p. 872.

† *Lancet*, 1881, vol. ii., p. 82.

‡ Hannay: *loc. cit.*

¶ *British Medical Journal*, 1883, June 30.

gin taking these pills as the hay-season approaches; and, under the use of this remedy, many persons who formerly suffered most severely from hay-fever have ceased to be troubled with it.

When the disease is established, tincture of opium is of great benefit in controlling hay-asthma, reducing the secretion, diminishing the sneezing, and at the same time bracing up the nervous system. It should be given in small doses of five or seven drops twice daily, and a saline purgative should be taken on alternate mornings. Belladonna has been recommended, but I have had no experience of its use in this complaint.

I trust very little to local measures in the treatment of hay-fever; but when there is profuse secretion, with an excessive tendency to sneeze, the inhalation of strong ammonia salts often gives great relief. I have not found injections of quinine, as recommended by Helmholtz, at all useful. Though in a few cases benefit was derived, in most instances no effect was produced, whilst some patients were actually made worse. The good effect is probably to be explained by the injection mechanically washing away the *corpus delicti* rather than by any parasiticide action. The same remark may apply to the case in which Binz* states that a solution of one part of salicylic acid to one thousand of water, thrown into the nares, cut short the disease. The vapor benzoini of the Throat Hospital Pharmacopœia has occasionally produced a soothing effect; and I have also seen good results from insufflations into the nose of a powder consisting of one-sixteenth of a grain of morphia and one grain of bismuth. This should be applied several times a day. Ferrier's snuff may be substituted for the above formula, but it should be applied by insufflation. It is also said† that great advantage has been derived from the snuffing of pure salicylic acid, ten or fifteen grains being used in this manner in the course of the day. As, however, this powder is very "strong," I am inclined to believe that most persons would find the remedy worse than the disease.

In a few cases I have known some benefit result from the use of medicated bougies, such as the bismuth and acetate of lead Buginaria of the Throat Hospital Pharmacopœia; but, like quinine-spray, they occasionally aggravate the mischief they are meant to cure.

The upper lip and the margins of the nostrils should be smeared over with benzoated zinc-ointment two or three times a day, when those parts are inflamed, or aconite liniment may be used in the same way.‡

For the relief of the irritation of the eyes, frequent bathing with very cold water is sometimes useful, though Roberts|| appears to have found more benefit from warm and slightly salt water. Sulphate of copper (two grains to one ounce) or sulphate of zinc (two grains to one ounce) may sometimes do good, but I have found a lotion containing two grains of acetate of lead with two drops of dilute acetic acid in an ounce of water, the most soothing application. Sedative collyria

occasionally allay the irritation: for this purpose a small quantity of a solution of acetate of morphia (one to three grains to an ounce) may be dropped into the eyes when they begin to itch.

Asthmatic patients are often relieved by inhaling the fumes of nitrated blotting-paper, the good effect of which is further increased by steeping the paper in a solution of stramonium, datura tatula, belladonna, or lobelia. A patent American remedy, consisting of nitrate of potash and powdered herbs, of which stramonium or datura tatula is probably the most important, is sold under the name of "Himrod's Cure,"* and when this powder is lighted and the fumes inhaled, they sometimes quickly relieve the spasm.

In hay-fever, the food should be nutritious and easily digestible. Owing to the depression which the complaint causes, stimulants are sometimes necessary; but they should, if possible, be avoided, or only taken in small quantities. Light claret, hock, and whisky diluted with water, are the least injurious. Tea and coffee have a special value in the asthmatic form of the disease, both in relieving the spasm and counteracting the exhaustion which follows it. Thorowgood† recommends citrate of caffeine for the same purpose, especially in cases where the heart is weak; he gives it in doses of two to three grains, dissolved in water or in warm coffee.

A New Sponge.

In the *Lancet*, May 3, 1884, Dr. Sampson Gamgee says:

"To Sir Spencer Wells I am indebted for the suggestion which led me to experiment with a variety of materials, with a view to preparing a sponge combining absorbing power and elasticity, and cheap enough to be burnt after use, so as to render sponge infection impossible.

"My first idea was to make a combination of pitch-pine shavings and absorbent cotton, within absorbent gauze. The resulting ball answered the purpose fairly well, but it was not soft enough. It would be tedious and profitless to recount the experiments made with almost every variety of vegetable and animal fibre, in combination with absorbent gauze and cotton. Willow shavings and Manilla fibre had brought us to what appeared very near perfection, when I accidentally found that a ball of curled cocoanut fibre, enclosed in absorbent gauze, sinks in water. That established, we made other balls with absorbent cotton in the centre of the cocoa-nut, absorbent cotton round it, and then the gauze envelope; the idea being to take up the fluid rapidly and transmit it, through the springy cocoa-nut fibre, to the absorbent cot-

*The original formula of this remedy has recently been published in one of the pharmaceutical journals. It is said to consist of stramonium, lobelia inflata, black tea, and nitre, in equal parts. If a little powdered aniseed or fennel be added to this preparation, it certainly produces a compound which in appearance and effect is very similar to that of Himrod's remedy. Careful microscopic examination, made at my request by those familiar with vegetable structures, has, however, failed to detect any tea-leaf in Himrod's preparation, though, of course, it is readily seen when the formula now given has been used. On the other hand, bearing in mind the fact mentioned in the text, that the drinking of tea often gives great relief to asthmatics, it is not at all improbable that the herb may have some effect, if burnt and inhaled.

† *Lancet*, 1881, vol. ii., p. 83.

*Deutsche Med. Wochenschr., September 22, 1877.

†British Medical Journal, 1878, vol. ii., p. 101.

‡Ringer: Handbook of Therapeutics. London, 1880 p., 288.

||New York Med. Gaz., October 8, 1880.

ton centre. By experiment, I found that a ball so made takes up most readily from sixteen to eighteen times its own weight of blood or water, which, when squeezed out, still leaves the ball elastic and absorbent, readily filling, and swelling out again, when dipped in liquid and squeezed, a number of times in succession.

"The results so far obtained were approved by Sir Spencer Wells, Sir William Mac Cormac, Dr. Richardson, F. R. S., Dr. Thomas Keith, Dr. James Sawyer, Dr. Robert Saundby, Mr. Joseph Bell, Mr. Christopher Heath, Mr. Pearce Gould, Mr. Edmund Owen, and Mr. Walter Whitehead, whom I only mention to acknowledge the very valuable assistance and friendly encouragement they have been good enough to render me.

"Once I had secured a good combination of fibres, it became a question how to render them perfectly and *permanently* antiseptic. This fresh start led on to another series of trials, of which it is only useful for present purposes to recount the end. Every endeavor having failed, it suddenly struck me that within the absorbent cotton nucleus of the sponge might be enclosed a very thin ball or capsule, containing the antiseptic, of any kind, and, within certain limits, in any quantity desired; the antiseptic to be set free by cracking the capsule with a squeeze, just before using the sponge. The idea proves perfectly practicable, and Messrs. Burroughs, Wellcome & Co., the manufacturing chemists, have undertaken to carry it out. Some little time must elapse before all the details can be perfected; but sufficient evidence has so far been obtained to warrant the belief that the principle of my sponge may be adapted to the fulfilment of many requirements, as an absorbent and antiseptic sponge, pad, or dressing, in civil or military surgery, in medical and in obstetric practice."

Injection of Solution of Corrosive Sublimate in Prostatic Retention of Urine.

In the *Brit. Med. Jour.*, May 17, 1884, Dr. Wm. Robertson writes: "Having lately read certain articles, part of which were taken up in discussing the merits of certain agents as injections for the bladder, I have been induced to relate shortly my experience in a case of retention of urine from enlarged prostate, with catarrh of the bladder, treated with corrosive sublimate injections, of strength 1 in 1,000. The patient, J. A., aged 71, married, was under treatment for a similar attack fourteen months ago, when suprapubic tapping was required for relief; and the length of time during which the attack lasted was six weeks. The present attack was ushered in with rigors, frequent desire to micturate, restlessness, constipation, and various other feverish symptoms. By the rectum was found a prostate about the size of an orange, tender and hot to the touch. With a large prostatic silver catheter, easy access was gained to the bladder this time, and eight or nine ounces of decomposing smoky urine were drawn off. By means of the same catheter I injected three ounces of the sublimate-solution warm, and allowed it to remain in the viscus three or four minutes. The same night the patient passed comfortably, with a much modified desire to micturate. The urine drawn off next morn-

ing was clearer, but yet cloudy, with less odor. During the day he could retain his urine up to the evening, when the urine drawn off was almost free from decomposition, and only cloudy towards the end of the stream. The night following this was one of comfort. A bungling use of the catheter next morning set up anew the former symptoms to a certain extent, with smoky urine and frequent desire to micturate. In twenty-four hours this had subsided, with a return of the urine to its normal (as far as this patient is concerned) state. The patient has now been one week under supervision, with injections night and morning, and can retain, with ease, his urine during the interval of catheterism. The propulsive power of the bladder is now considerable, and handling of the prostate is borne with much less distress. Defecation causes little or no pain. The urine is in quantity 50 ounces, of specific gravity 1012, acid and albuminous. Its color is amber. This is but one case; nor can the local use of the sublimate carry much weight until more extensive trial has been given it; but after having in similar cases used other ingredients for such injections, my experience does not furnish such a favorable result as I have had here; and in a patient who, from a consideration of his age alone, and also the state of his urine, requires the most cautious handling.

Determination of Albumen in Urine.

In the *Brit. Med. Jour.*, May 3, 1884, Dr. Oliver describes a ready method for the quantitative determination of albumen in urine. The proceeding consisted in comparing the opacity produced by a test-paper in a definite measure of the albuminous urine, with a standard of opacity which represented a known per cent. of albumen; and in adding water, when it exceeded the standard, until the two were seen to be exactly equal. The standard opacity (representing 0.1 per cent. of pure serum-albumen) was preserved in a permanent form by precipitating chemically pure alum by means of ammonia, the opaque fluid being sealed up for use in a short flat tube. The estimations were made in a flat graduated test-tube of a determined diameter, three-eighths of an inch. A definite quantity of the urine (20 or 40 minims, according as the urine was strongly or only moderately albuminous) was poured in, and the albumen was precipitated by either a ferrocyanic or a mercuric test-paper. The opacity almost at once produced was compared with that of the standard by placing immediately behind the tubes printed lines; when it over-stepped it, the urine must be diluted to the required degree. The number of times the volume of the urine had been increased by dilution represented so many decimals per cent. of albumen: for example, 20 minims of urine requiring to be diluted to 180 minims contained .9 per cent. Dr. Oliver showed, on taking the twenty-four hours' urine, how readily by this method the total amount of albumen daily discharged could be expressed in grains; it was only necessary to multiply the percentage by 4.36 (or roughly $4\frac{1}{2}$), and the number of ounces of urine: for example, .6 per cent. $\times 4.36 = 2.6$ gr. to the ounce, $\times 50$ oz. = 130 grs., total loss of albumen in twenty-four hours.

In this way, he believed that accurate data could be provided without loss of time for comparing the effects of treatment on the amount of albumen eliminated: and he suggested that quantitative analysis of albumen might become useful in diagnosing the forms of renal disease.

Tubercular Disease of the Thumb.

Before the Irish Academy of Medicine (March 28, 1884), Dr. Bennett showed a specimen of tubercular disease of the thumb, affecting half the ungual phalanx of the thumb of an old woman which he removed last summer. There was an ulcer beneath the thumb-nail. She had no glandular disease elsewhere, or trace of trouble in the axilla or any part of the arm. The ulcer had lasted for five or six years. The best attempt at diagnosis he could make was that it was the ulcer of cicatrices of Hawkins and Marjolin. He believed that it originated with some form of suppuration, and that it then progressed and finally resisted all treatment. It was warty, excavated, and extremely sensitive at the edges, and when a probe was passed, it could be felt that the bone was exposed, though not naked. There was no rough or carious bone. Other treatment having failed, and the pain being great, he amputated the extremity of the thumb, and the case had since done well.

Dr. Purser said the reason why the specimen was called tubercular ulcer of the thumb was for want of a better name. In the present specimen, he had not looked for a micro-organism, but the characters of the growth, as discovered by an ordinary examination, were those of tubercle with certain differences. In the present case, some of the small cells were epithelioid, and others lymphoid; but there was no evidence of caseation, and that was the point in which the case differed from ordinary tubercle; but the growths themselves had quite the appearance of recent tubercles.

Dr. Bennett said that, although he had not at first recognized the character of the ulcer, he concluded that amputation was the best course. This, however, was the first example of the disease that he had seen. Tubercular and scrofulous diseases affected the bones, both of old and young, and were liable to be mistaken for malignant diseases; but a superficial tuberculosis existing on a surface for five or six years, and causing absorption of the bone by its pressure, was quite new to him.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—The Alumni Association of the Chicago Medical College have published in pamphlet form the proceedings of their eighteenth annual meeting. It contains a necrological report, the address of the president, and other matters of interest.

—The New York State Board of Health have published a report on a remarkable outbreak of typhoid fever at Port Jervis, clearly due to in-

fecting milk. It is written by Dr. F. C. Curtis, and is worthy the attention of all sanitarians.

—Two novels are announced by two distinguished medical men, one by Dr. William A. Hammond, and one by Dr. S. Weir Mitchell. Both of these gentlemen have extensive practices in the specialty of nervous diseases, and it is a matter of astonishment how they find time to indulge in the vein of romance writing. Assuredly, however, they have but to draw on their observation for facts more wonderful than any dream of fiction. We may expect from such men a psychological analysis more subtle than that of ordinary mortals.

—Those who like science treated in verse and a discussion of universal relations, will find such in a privately printed pamphlet by Judge Thompson, of Wheeling, W. Va.

—In a recent reprint, Dr. Samuel Theobald, of Baltimore, discusses at length some modern theories regarding the pathogeny of sympathetic ophthalmia, viewed from a macroscopic standpoint.

—In a little book called "What and Why," the advantages of the bicycle and kindred vehicles are set forth. It may be had from Mr. A. A. Pope, 597 Washington street, Boston.

—We have before us a little book by Dr. John B. Hamilton, Surgeon General U. S. Marine Hospital Service, entitled *Lessons on Longevity, Paragraphs on Home Hygiene, and the Art of Prolonging Life*. He treats in popular style of food, cooking, sleeping-rooms, plumbing, funerals, and other matters of that sort. If what he says is not new, it is at least useful. Published by W. H. Morrison, Washington, D. C.

—The President's Address of the Texas State Medical Association, by Dr. A. P. Brown, discusses evolution, the history of medicine, and other subjects, in a pleasant manner.

—An appreciative memoir of Dr. John Forsyth Meigs, by Dr. William Pepper, will be welcome to the many friends of that late distinguished physician. It is a reprint from the Proceedings of the American Philosophical Society.

—Dr. Moses Gunn, of Chicago, in a recent reprint, discusses in an interesting manner the philosophy of manipulation in the reduction of hip and shoulder dislocations.

—Ophthalmologists will be interested to read some clinical observations on the use of jequirity in trachoma, by Dr. H. Knapp. His conclusions are that it is a quick, but not a safe remedy, and that at present its use ought to be restricted to cases of old and intractable pannus.

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AGAIN AN OLD "TRUTH" PROVEN WRONG.

It has been the general opinion amongst physicians, that most cases of death from tuberculosis happen about the twentieth year. In some not yet so very old text-books we find even the statement, that when an individual, whose parents have died of tubercular consumption, had passed his twenty-first year, he was past the danger of dying of the same disease, and in persons, who present the phthisical habitus, and in whom the hereditary influence is dreaded, the age from 19 to 21 is considered the most risky period.

The Imperial Board of Health of Prussia, an institution whose President is Dr. Koch, and whose observations and investigations have already been in more than one instance of inestimable value to our profession, has recently published a treatise by Dr. Würzburg (*Allg. Med. Centr. Zeit.*, 31, 1884,) on "The influence of age and sex on the mortality due to tubercular phthisis." The statistical tables referring to Prussia (perhaps the most reliable in the world) prove that during the five years, 1875-1879, of every 10,000 persons of all ages living in Prussia the following percentage of deaths due to tubercular phthisis was recorded :

	Percentage.
Under 1 year	23.45
From 1 to 2 years	20.41
" 2 to 3 "	12.51
" 3 to 4 "	6.83
" 5 to 10 "	4.66
" 10 to 15 "	5.86
" 15 to 20 "	18.37
" 20 to 25 "	30.24
" 25 to 30 "	36.73
" 30 to 40 "	41.12
" 40 to 50 "	48.42
" 50 to 60 "	67.94
" 60 to 70 "	93.18
" 70 to 80 "	61.72
Above 80 years	25.80

These statistics prove that after a larger percentage of the first childhood the minimum of death-rate is met with from 5 to 10 years, and thence up to the period of from 60 to 70 years a continuous increase is noted. These statements apply not only to the state of Prussia as a whole, but also to every city and borough ; and it is as-

tonishing to observe the regularity which the death-rate evinced in every province, the death-rate being all over the same, often to within one-twentieth of one per cent.

The same condition has been noted in Sweden and in the United States, with the only difference that in these countries the death-rate increases even beyond the seventieth year, so that no diminution whatever takes place after the first increase happening at the tenth year.

England, however, makes a remarkable exception. There the highest death-rate falls between 20 and 30 years, while between 50 and 70 the least number of people die of consumption.

Concerning sex in Prussia and Sweden, the male sex suffers decidedly more from the malady, while in England and the United States the female sex has a slightly higher percentage in the death-rate. In countries in which the male sex denotes a greater mortality, the latter increases with advanced age, while in those in which the female sex predominates in the death-rate, the greatest number of victims is recorded during the period of development, and continues thus up to the 50th year, whence the men also evince a higher mortality.

If there is any difference in the death-rate between city and country, it is that up to the 50th year the mortality is greater in cities, while after that age more persons seem to die of consumption in the country than in the city. But the difference in percentage is very small.

EXPERIMENTAL RESEARCHES ON CORTICAL ATROPHY.

For the purposes of determining the effect of atrophy of the gray cortical substance of the cerebrum, Dr. V. Monakow (*Neural. Centrbl.*, 12, '84,) has made a number of experiments. After destruction of the part of the posterior internal capsule of a recently born rabbit, containing probably the fibres of the occipital lobe, the grown-up animal evinces besides a defect in the ganglionic cells of the corpora geniculata externa, and in the middle white substance and in the gray matter of the anterior corpora quadrigemina, a diminution

of the whole occipital lobe. The white substance showed atrophy in a high degree, but the cortical substance was also greatly diminished in quantity. The third layer of the cortex, with the larger ganglionic cells, was mostly injured, and the fifth of the bridge followed the first in degree, while the others did not indicate any decided alterations. Division of the internal capsule of a recently born cat caused a remarkable inhibition of the development of the motor tracts, and atrophy of the motor area in the ascending parietal convolutions of the left side. Here also, especially the great cells of Betz of the third layer were atrophied, otherwise only the nerve-fibres of the fifth layer were slightly degenerated.

Whether the destruction of the pyramidal tract or of the distribution of the fibres of the corpora quadrigemina, or of both, produced the atrophic conditions, has not been determined by these experiments. Still, they teach us, in all lesions of the brain, by a careful examination to determine the original morbid process, to decide what morbid alterations might be secondary. They also explain certain forms of want of development, as they are met with in idiotic persons, and in such where a disease of the brain in early childhood later leads to want of development of certain parts of the organism. It may be possible, in this manner, to demonstrate the existence of trophic centres, just as the atrophy noticed in limbs affected by infantile paralysis has been proven to be in connection with and due to atrophy of the large ganglionic cells in the anterior cornua.

ON THE PRESENCE OF NEEDLES IN THE SUBCUTANEOUS TISSUES—THEIR MIGRATIONS.

In a clinical lecture recently delivered in the Hôpital Charité, Dr. Desprès has communicated some interesting facts respecting the singular toleration of needles by the subcutaneous tissues, and the migrations of these bodies. He relates the case of a young man, who, with the leg flexed on the thigh, falling on the anterior aspect of the knee, violently hit this part of the body against a long darning-needle, which was driven into the joint and disappeared. The youth con-

tinned to walk about as if nothing had happened. Four days after he appeared at the clinic. He then complained of severe pain in the popliteal region. Dr. Desprès examined this region and readily found and extracted the needle. Here the needle had traversed the joint and penetrated the popliteal space.

The migration of needles in the tissues is a well attested fact. Otto, of Copenhagen, communicates the case of a young girl, a patient of his, who had swallowed an immense number of needles, and two hundred and ninety-five of these were extracted from different parts of the body. Twenty-two were removed from the left breast.

Villars had a similar patient, a hysterical girl, who habitually swallowed quantities of pins and needles. "The pins advanced more rapidly than the needles. The patient describes the progress of the needles as being more painful, despite its slowness, than that of the pins."

With regard to the extraction of these foreign bodies, Desprès advises to "make haste slowly," unless the needle can be actually felt and fixed under the skin.

Cutting down on the supposed site of the needle, and groping for it with the probe and forceps, is apt to be disappointing. If the needle can be clearly felt in the subcutaneous parts, the point can generally be pushed through by a little skillful manipulation, so that a cutting operation will be unnecessary. Such foreign bodies seldom if ever produce abscesses.

RAILWAY MEDICAL SERVICE.

A circular has been issued by A. A. Talmage, fourth vice-president of the Wabash railway, stating that it has been determined to establish at an early date a hospital for the care and treatment of employees. Suitable buildings will be erected at a convenient location, and rules are laid down governing the admission of patients. Notice is given that after June 1, 1884, the sum of fifty cents each month will be retained from the wages of every man paid \$50 per month or more, and thirty-five cents from other employees. All

employees of the road will be entitled to the benefits of the hospital. Injuries received in fights or brawls or the result of vicious or immoral habits will not be treated at the hospital's expense. The Missouri Pacific adopted the hospital plan five years ago, and the contributing employees endorse the system fully.

This is an example which we earnestly hope will be imitated by all the other leading roads before many years. A medical service of this nature should form part of the organization of every line. The liability to accidents is at all times present, and it is a plain duty of the company to take all reasonable precautions that passengers and employees shall suffer as little as possible from the inevitable risks to which they are exposed.

The method of deducting a certain sum from the wages of the men to meet the expenses of the medical service may seem a little hard, but this should be regarded in the nature of an insurance against accident. It will be amply compensated by the certainty of prompt and efficient surgical aid in case of injury.

THE PARASITES OF MONEY.

To the carriers of infectious material, money has at last been added. Recently, Prof. Reinsch in Erlangen (*Allg. Med. Centr. Z.*, 31, '84), examined a number of coins, and found, to his astonishment, that all coins which showed some encrustation, little sediments, etc., on their surface, contained living bacteria. R. then collected coins of all nationalities, and made the same observation in all coins that had been in circulation for a number of years. When the adherent dirt-particles are removed with a perfectly clean (aseptic) knife, and dissolved in distilled water, a sufficiently powerful microscope will at once reveal the bacteria. The dirt sticking to coin seems to offer to these microzymes a soil specially fertile and favorable to their development. Considering the immense circulation of money passing through millions of hands, it may be probable that coins form no small factor in the transfer of zymotic diseases.

A series of coins which had for some years been in circulation were freed from their dangerous parasites by placing them in a mild, boiling solution of caustic potash, which, by removing all dirt and dust-particles and all incrustations from the coins, liberated them also from their by no means innocuous tenants.

NOTES AND COMMENTS.

Antiseptic Inhalations in Phthisis.

Dr. C. Nelson Gwynne publishes a paper on this subject in the *Medical Press*, May 7, 1884, in which he says that while he believes that the bacilli are reasonably secure from the action of antiseptics, yet as a valuable adjunct to the general treatment he is convinced of their very great importance. The almost unanimous opinion regarding their value by the patients themselves confirms him in his opinion. That they "ease the breathing," "assist up the phlegm," "lessen the phlegm," are the expressions he daily hears regarding them; and the benefit derived is so great that many of his patients make use of the respirator-inhalers much more frequently than he had recommended, and after many months of experience still are as firmly convinced as ever of the benefit they receive from their use. The principal ingredients he has used are carbolic acid, creosote, thymol, iodine, and turpentine; and all these his patients have had no difficulty in using, nor had any dislike to, with the exception of the iodine. The etherialized tincture is, he finds, well recommended; but he could never induce his patients to make use of it for any length of time, nor did they speak favorably of the benefit derived from it.

There are a great number of antiseptic respirators in use, but the one he generally adopts is Dr. Wm. Roberts'. It is of blackened metal, perforated with large holes at the front, shaped to the lips, and half or three-quarters of an inch in depth, with a hinged lid which opens outwards, and allows the introduction of some cotton wool saturated with the material intended to be inhaled. There can be little doubt that impregnating the air of the room with antiseptics will finally take the place of respirator-inhalers, and already many plans have been devised for doing this. If towels saturated in carbolic acid are hung in a room, it has been found that after a few hours nearly all the carbolic acid will have disappeared from the towels, and will have been

taken up by the air of the chamber. Of all the antiseptics, creasote perhaps holds the highest place for this purpose. There are well authenticated cases recorded of phthisical cases having quite recovered by engaging in the manufacture of this article.

Treatment of Whooping-Cough.

Thus far, the treatment of whooping-cough has not been very satisfactory. Bromides, chloral, morphia, belladonna, asafetida, quinine, have all been tried in vain. Careful treatment of the accompanying catarrh, keeping the secretions going, the application of an asafetida plaster to the chest, decided doses of quinine and an occasional dose of chloral at night to insure sleep, seemed to constitute the most successful procedure.

Recently, Dr. Moncorvo, in Rio de Janeiro, has written a monograph on whooping-cough. His observations, which are rather extensive, have led him to the following conclusions:

1. Whooping-cough, the nature of which, until recently, was the subject of the greatest dispute, seems, to judge from the latest clinical observations and microscopical examinations, to belong to the zymotic diseases.

2. The disease seems to be due to the presence of micrococci, which develop themselves to an alarming degree in the mucous membrane of that part of the larynx situated below the glottis, and infiltrate the epithelial cells.

3. Resorcin, applied directly to the mucous membrane of the larynx, has not only diminished in a very short time the number of the attacks of coughing in cases in which it was employed, but it has also decidedly cut short the course of the malady. (*Allg. Med. Centr. Zeit.*, 31, 1884.)

The best method of applying resorcin in these cases is its administration by an atomizer. If this cannot be had, it should be blown in the usual manner into the larynx by the aid of a quill. The only trouble is that whooping-cough is apt to attack young children, and that in them all direct applications to the larynx are difficult to execute. The internal administration of resorcin is, however, utterly useless.

A Convenient Method of Applying Antipyretic Treatment.

Dr. George Mundie thus writes in the *Brit. Med. Jour.*, April 12, 1884:

"A married woman was suffering from general pyrexia complicated with erysipelas. The temperature rose to over 106° Fahr., and seemed to threaten a fatal issue; and I had strongly urged

had been used for one of them, happening still to be in the house, I had it filled with water, and substituted for the bed on which she lay, placing only a single blanket between the patient and the bed. The result was that in six hours the temperature had fallen two degrees; next day it was 103° Fahr., and the patient ultimately made a good recovery. It has since occurred to me that a water-bed might often be made serviceable, when an actual water-bath could not be employed.

"The second case was that of a child aged about four, who had been suffering from diarrhœa. I saw it at my surgery twice; and a week after the last occasion I was sent for hurriedly, and found that the child, although it had been out and seemed very well that day, had been suddenly seized with rigidity of all extremities. The intellect was quite clear, and the child was smiling, and seemed happy. Next morning it was seized with strong convulsions, the temperature having risen to 107°. I immediately placed the child in a bath, bringing the temperature down about 1.5°. I could not, however, prolong the bath as I wished, although it evidently gave relief. I was unable to have the bath again used, and the child succumbed the same evening. When the child had been brought to me, there was nothing to indicate any severe illness. I made a post-mortem examination, and found extensive ulceration of the bowels (typical), especially in Peyer's patches. I then regretted the bath had not been given a more effectual chance, as it was evident that a reduction in temperature was what was indicated."

Partial Inversion of the Uterus by Tumors.

The patient was suffering from a polypus-like tumor prolapsing into the vagina. The tumor began at the posterior wall of the uterus, was removed with scissors, and in consequence of partial inversion of the uterus, perforation of the latter took place. The severe hemorrhage ensuing caused Dr. Werth (*Arch. f. Gyn.*, xxii. p. 65,) to proceed to total extirpation of the organ. The recovery was slow but perfect. Referring to the case Dr. W. remarks, that heretofore too little attention had been paid to the inversion of the uterus, induced by tumors, and he explains the morbid process by contending that the walls of the organ become weakened, and that in consequence of the continuous pressure exerted by the growing tumor, the neck of the uterus is widened

to such an extent, that by the also continuous traction of the tumor a partial inversion is bound to happen, as all favorable conditions—flabbiness of the walls, dilatation of the neck, persistent traction—are permanently present in these cases. For the removal of these tumors W. recommends their enucleation after laying open the capsule, to treat them, therefore, as interstitial myomes.

Cortical Hemiplegia with Word-deafness.

A man, æt. 37, who seven years before had been infected by syphilis, had in the year 1878 an apoplectic attack with right-sided, and 1879 one with left-sided hemiplegia and aphasia. Three months later the aphasia had disappeared. The year following he was again seized with apoplexy, followed by left-sided hemiplegia, aphasia, and now also word-deafness. The patient had at his disposal but a few words; his faculty of hearing, as has been well proven, is intact; but he wants the understanding for spoken words; neither can he read written words. Psychological disturbance has not been noted. Without any change in his condition, in 1883 death suddenly ensued. The post mortem showed: Destruction almost of the whole right posterior central convolution, of the parts of the superior parietal lobule near it, and of the gyrus supramarginatus. Oppenheim (*Centrlb. f. d. m.*, W., 15, '84,) declares this lesion to explain the hemiplegia sinistra. In the left hemisphere a partial destruction of the first two temporal convolutions was found, which had to be considered as the cause of the sensory aphasia.

Hepatic Abscess.

A paper, by Dr. S. West, upon Multiple Abscesses in the Liver, at the Clinical Society of London, March 14 (*Med. Times and Gaz.*, March 22, 1884), gave rise to a discussion of some interest. Numerous cases were cited of hepatic abscesses owning no primary cause outside of the liver it-

Poisoning by Hemlock.

Several cases of poisoning occurred recently among the boys belonging to the training-ship Cumberland stationed on the Clyde, Scotland. It appears that a detachment of the boys was on shore for walking exercise, and several of them amused themselves by collecting various roots and herbs growing near the shore. Of one of these roots a number of the boys partook, believing it to be harmless; but, shortly afterwards, all who had eaten of it were attacked by sickness and other signs of poisoning. No less than ten became seriously ill, the chief symptoms being great stupor and loss of power in the limbs. Steps were quickly taken to obtain medical aid, and, under proper treatment, all eventually recovered; but considerable anxiety was felt for some time in reference to five of the cases that were removed to the infirmary, the state of unconsciousness having lasted for some hours. An examination of the herb showed that it belonged to the umbelliferæ, and was one of the hemlock species.

Treatment of Condylomata.

Salicylic acid and boracic acid are both very good remedies in syphilitic condylomata. Formerly, we often used to remove larger warts of that kind with the scissors, and then cauterized the wound; but since we have been employing the following powder, which is dusted three times daily over the new growths, we have never had occasion to have recourse to any other remedy:

R. Hydrarg. muriat. mit.,	gr. xxx.
Acid. borac.,	gr. xv.
Acid. salicylic,	gr. v.
M. f. pulv.	

All moisture and disagreeable odor at once ceases, and who has not seen the effect of this powder, would scarcely believe it: the condylomata almost visibly dwindle away.

Hysteria in the Male Sex.

Cases are not extremely rare where hysteria occurs in males, but one was recently reported to the Parisian Société des Hôpitaux which offered a striking peculiarity. A young man with a number of hysterical symptoms suffered also with constant pain in the iliac region, just where in women the ovary is located. Dr. Joffroy explains this by the presence in man of an important nervous plexus situated beneath the location of the ovary in woman. This is the seat of the pain in both cases, and the tender ovary of hysterical women is principally an example of nervous sympathy.

Pilocarpine in Puerperal Eclampsia.

As of interest in connection with the cases which we have already reported, we note in the *Med. News*, April 26, 1884, that Dr. E. L. Marchal, of Alabama, reports a successful case. One single dose of one-fifth grain of muriate of pilocarpine was given hypodermatically, and though the women lay comatose for twenty-four hours, there were no more convulsions. Dr. M. thinks that pilocarpine is especially indicated where there is, as it were, a locking up of the secretions.

Studies on Alcoholism.

Dr. Mierzejewski, of St. Petersburg, has recently given much study to the results of the abuse of alcohol. He thinks that the impurities of distilled liquors have much to do with their hurtful effects. He commends, therefore, the example of Belgium, which applies the whole tax on drinks to maintaining the sanitary police, part of whose duty is to secure purity in the beverages. This suggestion of his is also worthy of the attention of our own legislators.

New Test for Albumen.

Dr. G. Johnson recommends as the surest and most reliable test for albumen, picric acid in powder form. The smallest possible quantity of the powder, added to the undiluted urine, will at once reveal the presence of albumen.

The Relations of Ovulation and Menstruation.

This much-discussed question seems no nearer a definite conclusion than ever, for we find in a long article on the subject by Mr. Lawson Tait in the *London Medical Times*, May 10, 1883, that af-

ter looking carefully into the subject he is satisfied that the evidence so far has completely destroyed the ovular theory of menstruation. Yet in the same paragraph, he says that he is persuaded that the investigation is worth further perseverance.

SPECIAL REPORT.

OPHTHALMOLOGICAL MISCELLANIES.*

BY CHARLES S. TURNBULL, M. D., PH. D.

In reviewing the literature of ophthalmology we have been induced to note a few of the novelties of this special branch of the practice of medicine, because we feel confident that many interesting and unique cases must be lost to those who do not have time enough to read all that is published in the several special journals throughout the world. Unless one is working day by day in this special field, he can form no idea of the vast amount of literary work annually published by ophthalmologists at large. The eye is divided and subdivided, and studied macroscopically as well as microscopically, some workers even devoting large portions of a lifetime to the embryology of but a part of the optical apparatus.

We are indebted for most of this material contained to the *Archives of Ophthalmology*, edited in English and German, and issued quarterly by Drs. H. Knapp, of New York, and C. Schweigger, Berlin, in conjunction with more than half a hundred of distinguished men throughout all parts of the world, each contributing to make up a volume of over 500 pages of rich and rare literature. When we consider that this constitutes but a portion, much less than half, of all that is written, it is easy to imagine how impossible it would be for any one man in active practice, to read all that might, even on account of its novelty, be of interest to him.

To look back over a period covering about three years, and without reference to a special date, we would notice the use of a "magnet" for the removal of particles of steel and iron from the interior of the eye, devised by Gruening, of New York; the same instrument has been used for the removal of pieces of steel from the anterior chamber, and cornea; another for the detection of the presence and location of pieces of steel and iron in the eye by the indication of a magnetic needle, by Pooley, of New York.

Hirschberg reports the successful removal of a

piece of iron from the eye, and Jany a chip of iron from the vitreous, with the electro magnet; he says, "real triumphs are gained with the magnet only in those cases where we have to deal with a piece of iron which has but recently entered and is suspended in the vitreous, and which, with forceps, hooks, and spoons, can but rarely be removed without permanent damage to the eyeball."

Magnus recalls the fact that the magnet had been used as early as 1646 by Fabricius Hildanus, and, as he expressly mentions, at the suggestion of his wife.

Jeffries, of Boston, removed a piece of iron from the eye by the electro-magnet through a corneal section, and Oppenheimer removed another through a scleral section; Gruening's magnet was used in this case.

Herman Schafer, in speaking of the effects of eserine and the mydriatics atropine, duboisine, homatropine and hyoscyamine, states in regard to the influence of eserine upon the three agents, atropine, duboisine, homatropine, that it counteracts the effects of homatropine completely and permanently; that of duboisine, and more particularly that of atropine, however, only when instilled in larger quantities, and then only for a brief period, after which it yields again to the effects of the latter.

In general, it is sufficiently demonstrated that, as respects the dilatation of the pupil, atropine, if somewhat slower, possesses a more lasting influence than duboisine; that the latter dilates the pupil in a shorter time, and momentarily acts more energetically, but loses its influence more quickly; finally, that homatropine develops its influence in a briefer time than either of the other agents, but produces a lesser dilatation of the pupillary diameter, and is the first to decline in its effects. The degree of concentration in which the homatropine is employed is apparently without influence upon the duration of the effect.

The accommodation is paralyzed more rapidly by duboisine and homatropine—by DUBOISINE even a little more so than by homatropine; with the latter, however, the normal state returns in twenty-four hours, with duboisine after three to four days. Paralysis of the accommodation by atropine proceeds very gradually, and persists the longest.

In accordance therewith would be the practical application of these three agents. Were it desired to secure simply dilatation of the pupil for the purpose of examining the fundus, or to paralyze the accommodation for the certain determination of the state of refraction, homatropine is decidedly to be preferred to the other drugs.

*A paper read before the Alumni Association of the Auxiliary Department of the Medical Department of the University of Pennsylvania, April, 1884.

Risley concludes, "That for the correction of anomalies of refraction in otherwise normal eyes, the homatropine is to be preferred."

If, on the other hand, a therapeutical effect is desired, homatropine is to be set aside, on account of its insufficient and too restricted effect, and the application of atropine and duboisine can alone enter into consideration.

Risley, from a therapeutic standpoint, concludes "That if retino-choroidal disturbance is also present, hyoscyamine or duboisine are preferable, (a) to atropine, because of the shorter duration of the treatment; (b) to homatropine, because of their more persistent control over the ciliary muscle; and that hyoscyamine is preferable to duboisine, since the tendency to systemic poisoning is not so great.

Shäfer recommends the use of duboisine in iritic conditions, with or without extensive synechiæ, where atropine had been employed for some length of time, and with but partial success, on account of conjunctival and ciliary injection. Duboisine, he says, never causes conjunctival irritation, and even diminishes that caused by atropine. And we cordially endorse the recommendation of duboisine in iritic conditions. Knapp says of quinine amaurosis that the characteristic features, according to Roosa, Wecker, Voorhies, Michel, Gruening, and himself, are:

1. Total blindness subsequent to the taking of large quantities of quinine.

That the total blindness, in all the cases thus far made known, was only temporary.

2. Pallor of the optic discs.
3. Marked diminution of the retinal blood-vessels, in number and calibre.
4. Contraction of the visual field.

K. mentions some other symptoms: "1. Diminution of the color-sense (red-green, then green blindness); 2, diminution of the light-sense (as if a veil was over the eyes); 3, the pupils during the total blindness are irresponsive to light, but (Gruening) move on accommodative efforts; 4, anæsthesia of the cornea; 5, impairment of hearing, to total deafness and tinnitus aurium in every case, though transient."

The subjective noises and deafness, though exceedingly frequent symptoms of quininism, are always transient, at least he has not been able to trace one case of persistent deafness or tinnitus aurium to the use of quinine alone. (L. Turnbull has long since emphatically expressed himself in a similar way.) The impairment of sight, he says, will disappear entirely in the mild cases, whereas in the severe typical ones the restoration of the central acute-

ness of vision seems to be complete only in a certain number of cases; in almost all, however, a fair amount, $\frac{20}{100}$ to $\frac{50}{100}$ of S., is regained. The contracted visual field expands slowly, commonly does not reach its natural limits again.

The progress of quinine amaurosis, even in advanced cases, is, on the whole, good, as there is thus far no case of permanent blindness on record, and the typical, i. e., fully developed cases, are very rare. How frequent the mild cases are, and how rapidly they recover, remains for further investigation to ascertain. No beneficial mode of treatment seems yet to have been discovered. The "depleting therapy" to which V. Graefe ascribes the recovery in his second case will, in view of the marked ischæmia of the retina discovered of late, scarcely find any advocates now. Nitrite of amyl, given in the way of inhalation, by Voorhies, Gruening, and Michel, showed no effect. Strychnia and other remedies, as well as electricity, were likewise inefficient. Horizontal position, as long as the general anæmia, and particularly that of the brain and eye, are marked, seemed beneficial. Generous diet, with perhaps gentle stimulants, and as soon as practicable sojourn and exercise in a healthy, invigorating atmosphere, appear rational means of recovering strength, and supplying the retina with what it most needs—blood.

Chisholm uses the actual cautery needle in the treatment of conical cornea. The operation is performed with a fine sewing needle, heated to whiteness in an alcohol lamp, and thrust through the apex of the cone. The subsequent cicatrization causes the flattening of the cone. Dr. C. also uses a needle designed for the destruction of the hair-bulbs, in cases of displaced cilia, by electrolysis. It consists of a needle set into a handle, which is introduced cold into the root of the hair-bulb. By pressing on a button connection is made, and the needle becomes heated, and the electrolytic action is manifest by the bubbles of gas escaping.

Wall reports a case of congenital absence of the eyeballs, "anophthalmia." The tutamina oculi were perfectly formed, but there were no eyeballs, even in a rudimentary form. The lachrymal gland was present. The child was a white male, and six months old.

Ayers mentions concerning the physiology of the visual purple, and sums up his conclusions as follows: "We know that the purple is a photochemical substance which is sensible to light, and that its seat is in the outer segments of the rods, whereas it is never found in the cones. The cones, on the other hand, being the only ele-

ments found in the fovea centralis, we are forced to the conclusion that distinct vision, both for objects and for colors, is independent of its existence. In the higher classes of animals it is sensitive to light, but in some deep-sea fishes, cephalopods, etc., it has its seat in the rods, but is no longer sensitive to light, although it has the same color as before. Where it is not sensitive to light, the optical structure of the eye is very defective. It is an albuminoid compound, and is a secretion of the pigment epithelial cells of the retina; but this secretion is not controlled by any of the larger nerve-trunks, which have a part to play in the functions of the eye. We know of no drug which can diminish its secretion, but pilocarpine and muscarine greatly increase it."

Galezowsky reports a case of *congenital irideremia*, (absence of the iris) through several generations.

Wolfe (Glasgow) reports a case of *bleeding tumor of the iris*, about four mm. in diameter, bleeding every four to six weeks.

Chisholm reports a *piece of metal in the eye for twenty-three years* without causing sympathetic ophthalmia.

Bremer, among 223 deaf mutes, found nine cases = 4 per cent. of *retinitis pigmentosa*.

Haffner reports the *rare migration of a round worm 3 cm. in length, into the left lower lachrymal canal*, in a child suffering from severe whooping-cough.

Sigismund reports a *small splinter of wood kept in the eye for forty-seven years* without any disturbance.

As ophthalmological anomalies, Keyser reports three cases of *congenital dislocation of crystalline lenses* (ectopia lentis); in one, aged twenty-six, the lenses were dislocated differently, but not symmetrically, as is usually the case. In the right eye, the lens was dislocated inward, and the left eye directly upward. In the other two cases, which were also anomalies, the lenses were dislocated directly downward, entirely out of the region of the pupil. These two cases were daughter and mother.

A case of *double pupil, diplokorina*, in but one eye of a lady aged twenty-six. There was a broad band $1\frac{1}{2}$ mm. in width, running across, from margin to margin of the iris, at an angle of 110° . It extended only from the extreme pupillary edges of the iris, and was of the same thickness and color, and continuous structure of the iris. Patient had never suffered from any inflammation of the eye. As a congenital anomaly of the iris, it was rare, as occurring in but one eye.

(To be continued.)

CORRESPONDENCE.

Vomiting During Pregnancy.

EDS. MED. AND SURG. REPORTER:—

Mrs. ———, multipara, in the second month of pregnancy was taken with intense nausea, followed in a few days by vomiting. This condition lasted three weeks, during which time my patient was brought to the very verge of the grave. Every prominent and boasted specific was used, including "pop-corn" and "ingluvin;" every one was rejected as soon as taken, notwithstanding our perseverance with them—"usque ad nauseam"—and she positively declared that my remedies were worse than her disease.

Everything, however, bland and unirritating, was almost instantly rejected, and even the very mention of any article of diet induced violent retching. For eleven days not one particle of food was taken and retained a moment. My patient's brain became affected. She talked at random, believed that her whole abdomen was being pulled out, piled pillows on the stomach to hold it down, etc. Pulse feeble and rapid, with intense thirst. My patient was starving to death. To produce abortion now was seriously considered, but fearing its after effects, we concluded to try other remedies. Believing, from her condition, that if I could bring her power of will to assist, I commanded her to take one-half teaspoonful of "Beef Peptonoids," by Reed & Carnick, every half hour. For twelve hours this was retained partially, but after that time it too was rejected. She had gained a little. Our next resort was a dernier one, as we supposed, to "Horsford's Acid Phosphate," and chicken water, which, we are happy to say, acted like a charm. The nausea and vomiting ceased, and my patient is to-day in her usual health. JOHN W. AYLER.

Poolesville, Md.

A Unique Recovery from Wound of Knee-joint.

EDS. MED. AND SURG. REPORTER:—

During an experience of over thirty-nine years, I have met with a good many singular cases of gun-shot wounds. But on May 11, 1871, was called to a case which terminated in a way, as far as I can learn, which may truly be termed unique.

Ben Grant, aged about 29 (colored), hauled a load of goods from the river, and with it a musket charged with duck-shot; taking out his freight, he took the gun by the muzzle and pulled it out of the rear of the wagon; it was discharged, with the muzzle nearly touching the patella; horizontally across that bone the charge passed, and carried away four-fifths of it as neatly as if cut out with a gouge. Neither the condyles nor any other bone was injured. I determined to see if the knee could not be saved. Approximated the edges of the huge gap with long strips of adhesive plaster, gave him a few doses of morphine to be taken at stated intervals, and left a lotion composed of carbolic acid, glycerine, whisky and water, to be constantly applied on the wrapping over the wound; visited the case for several days to note progress, etc. If he had any fever, it was scarcely

perceptible; suffered but little pain; the wound had no unhealthy symptoms. He was kept supplied with the lotion for a long time. To my astonishment, after taking out the small remnant of patella left, on account of necrosis, and keeping up passive motion of the knee-joint, the wound gradually healed, and in about eleven months was well. He now has as serviceable a knee-joint as he ever had, and can perform any labor, and has done so for nearly twelve years.

I examined the leg a few days ago; there seems to be nothing which fills up the gap of the lost patella; no union of the tendon of the quadriceps and ligamentum patella, but simply a vacancy. How the complete motion of the knee-joint and its strength are maintained, is a mystery to me.

If any one who reads this article has ever seen, read, or heard of such a case, please let it be known.

G. R. RAMSAY, M. D.

Lawtonville, S. C., April 23, 1884.

Rheumatism of the Stomach.

EDS. MED. AND SURG. REPORTER:—

G. W. S., M. D., asks for the suggestion of a treatment for the case of his female patient. It may be presumed that he has made his diagnosis, and that the case is one of those obstinate and curious nervous and rheumatic affections which so often attack females about the age of his patient. It is best not to wait for the return of the pain, but to commence treatment at once by the application of six or eight leeches to the epigastric region if the slightest tenderness or pain should be evinced by pressure over the pit of the stomach. The leech-bites should be allowed to bleed for two or three hours, and in a day or two a flying blister, three inches by four, be placed upon the accustomed seat of the pain. A powder composed of six grains of calomel and eight of rhubarb, should be given at bed-time, and followed in the morning by a saline purgative to stimulate the bowels and liver to a healthy action. This powder may be repeated once a week, and after the action of the first dose, the following pills and mixture should be regularly taken:

R. Sulphate of quinine,	grs. xxj.
Pulv. ferri sulph. (sic.),	grs. vij.
Pulv. aloes (sic.),	grs. iij.
Pulv. capsicum,	grs. vij.
Syrup,	q. s. M.

In 21 pills divide. Sign.—Three pills three times a day before each meal; and,

R. Iodide of potassium,	ʒj.
Vin. colchici sem.,	ʒiij.
Syrup simple,	ʒjss.
Aqua destil.,	ʒiv. M.

Shake well and take a tablespoonful three times a day after each meal. Should the patient be restless at night, I would give:

R. Bromide of ammonium,	ʒj.
Bromide of sodium,	ʒij.
Tinct. henbane,	ʒss.
Syrup simple,	ʒij.
Aqua menth. pip.,	ʒiv. M.

Shake well. Sig.—A tablespoonful or two at bed-time. I would repeat the blister once a month, and continue the treatment for two or three

months, varying it according to the physiological effects of the medicines prescribed. Electricity may also be used. J. B. JOHNSON, M. D.

Washington City, D. C.

NEWS AND MISCELLANY.

How Liston Reduced an Obstinate Dislocation.

In an address published in the *Edinburgh Med. Jour.*, May, 1884, Dr. Alexander Keiller relates the following amusing anecdote of the great Liston:

"We have already referred to his powerful build, the mere appearance of which was more than enough to make even the biggest bruiser hesitate before encountering Liston's fisticuff, in either the noble or ignoble art of self-defence; and in thinking of our present hero as an object of physical power, we shall here cite the particulars of a case which went to exhibit his force of skillfully-applied will as well as muscular dexterity. A strong fellow of a carter was one day admitted into the old Infirmary in consequence of an overlooked dislocation of the shoulder-joint, which puzzled the surgeons on duty to reduce, especially as their repeated attempts at reduction were greatly frustrated by the too obviously determined resolution of the obstreperous and unusually resisting monster of strength, whose unmanageable muscularity Liston was afterwards induced to alone cope with and subdue, and which created a scene more akin to that of bull-baiting than to human surgery.

"We were fortunate enough to witness this new trait of tact as well as of strength, and on the still unsubdued and as yet unrelieved animal being again led into the enclosed ring, he was immediately pounced upon by the herculean Liston, who at once firmly grasped the obviously fixed, because immovably dislocated extremity, and which he continued powerfully to pull and twist, and then to violently manipulate, under a perfect storm of the most dreadful oaths and personal kicks, even against the region of parts by no means well or safely protected. Liston, however, was quite equal to the awkward situation, and as every kick with dangerous force was launched at him in front, he knew his anatomy too well not to swing round so as to receive them on amply-cushioned parts behind, until his own time came to return the madman's blows and imprecations with confounding, and at the same time most successful interest; for, while engaged keeping up the extension required to overcome, if possible, the muscular contraction in order to facilitate the reduction aimed at, Liston knowingly and cleverly seized his opportunity, the most precious opportunity in such cases, of staggering the muscles into comparatively flaccid abeyance. Liston, while keeping up the extension with one of his big and powerful fists, and fiercely eyeing his still cursing and kicking surgical victim, loudly exclaimed: 'You d—d scoundrel, what are you swearing at?' and with one momentarily-released right mighty hand struck him a bang between the eyes, when immediately, through Liston's masterly manœuvring, in popped the stubborn joint of the now hanged-up-eyed carter, who ob-

vionsly failed to appreciate either the laughter or the applause of the audience."

Connecticut State Medical Society.

The following papers were read at the ninety-third annual convention, held at New Haven, May 28 and 29:

"The Medical Profession and its Claim to the Respect and Gratitude of the Community," by Dr. E. B. Nye, of Middletown. "Medicine, Fifty Years Ago," by Dr. R. W. Matthewson, of Durham. "Points on Strangulated Hernia," by Dr. G. W. Harris, of Old Lyme. "Stone in the Bladder," by Dr. W. H. Carmalt, of New Haven. "An Unsuccessful Case of Wiring a Simple Fracture of the Patella," by Dr. Carmalt. "Subtrochanteric Osteotomy," by Dr. Carmalt. "Extirpation of the Tongue for Cancerous Disease," by Dr. Carmalt. "An Ulcerating Mucous Patch of the Vulva, with Condylomata about the Anus," by Dr. F. E. Beckwith. "The Germ Theory of Disease," by Dr. N. E. Wordin, of Bridgeport. "The Treatment of Conjunctivitis," by Dr. F. M. Wilson, of Bridgeport. "The Early Diagnosis and Treatment of Potts's Disease," by Dr. George B. Packard, of Hartford. "Malarial Diseases Cured without Quinine," by Dr. Ambrose Beardsley, of Birmingham.

Officers for the ensuing year: The nominating committee presented the following list of officers, for whom the Secretary was instructed to cast the ballot of the Society:

President—B. N. Comings, of New Britain.

Vice-President—E. C. Kinney, of Norwich.

Treasurer—E. P. Swasey, of New Britain.

Secretary—S. B. St. John, of Hartford.

Missouri State Medical Association.

At the twenty-seventh annual session, held in Sedalia, May 20, 21 and 22, the following papers were read: "Eczema," by Dr. H. Ohmann-Dumesnil, of St. Louis. "The Cause and Cure of Quackery and Quackery," by Dr. G. M. Dewey, of Keytesville. "A Case of Slow Pulse," by Dr. Glasgow, of St. Louis. "Neoplasms from a Practical Standpoint," by Dr. E. H. Gregory, of St. Louis. "Idiopathic Sarcoma of the Skin," by Dr. Hardaway, of St. Louis. "Periodic Pains Caused by Diseases of the Womb and its Appendages, not Relieved by Anti-periodics," by Dr. P. V. Schenck, of St. Louis.

Officers for the ensuing year:

President—Dr. H. H. Middlekamp, of Warrenton.

Vice-Presidents—Drs. T. F. Prewitt, of St. Louis; W. E. Evans, of Boonville; B. G. Dysart, of Paris; H. W. Lane, of Jasper; S. G. Griswold, of New Haven.

Recording Secretaries—Drs. J. H. Thompson, of Kansas City; N. M. Baskett, of Moberly.

Corresponding Secretary—Dr. F. J. Lutz, of St. Louis.

Treasurer—Dr. C. A. Thompson, of Jefferson City.

After reading several papers by title, and referring them to the Committee on Publication, the Association adjourned to meet in St. Joseph, on the second Tuesday in May, 1885.

Louisiana State Medical Society.

At the annual meeting held at *Baton Rouge*, May 21, 22, and 23, the following papers were read:

"Annual Address," by Dr. Davidson. "The Principles Controlling the Mind and Directing the Tendencies of the Age," by Col. K. A. Kross. "Acute Plastic Iritis," by Dr. Bruns, of New Orleans. "The Spleen; its Anatomy, Pathology, and some of its Lesions," by Dr. G. B. Underhill, of New Orleans. "Tetanus and Tetany," by Dr. M. Schuppert. "Contagion and Germs," by Dr. Hardie. "Cremation," by Dr. F. Formento, of New Orleans.

Officers for ensuing year:

President—Dr. R. H. Day, of East Baton Rouge.

Vice-Presidents—Drs. C. J. Bickham, of New Orleans; E. S. Lewis, of New Orleans; T. J. Buffington, of East Baton Rouge; C. M. Smith, of Franklin; I. J. Newton, of Bastrop; T. J. Allen, of Shreveport.

Nebraska State Medical Society.

At the sixteenth annual meeting, held in Omaha, May 13 and 14, 1884, the following officers were elected for the ensuing year:

President—Dr. F. G. Fuller, of Lincoln.

Vice-Presidents—Drs. G. N. Peebles, of David City, and M. J. Gahan, of Grand Island.

Permanent Secretary—Dr. A. S. Mansfelde, of Ashland.

Corresponding Secretary—Dr. R. R. Livingston, of Plattsmouth.

Treasurer—Dr. R. C. Moore, of Omaha.

Grand Island was selected as the place for holding the next annual meeting.

Hospital Chaplaincies in France.

M. Desprez, surgeon to the *Hôpital de la Charité*, has written to the *Journal des Débats* to state his experience of the working of recent legislation, by which all persons connected with religious bodies are excluded from the Paris hospitals. Himself a Republican and a free-thinker, he nevertheless emphatically condemns the new order of things. The lay assistants who now take the places of the Sisters of Charity at the bedside of the sick are, he declares, far less efficient than the nurses who have been displaced, and he condemns the whole system of secularization which comprises the suppression of hospital chaplaincies, as contrary to the interests of the poor.

A Growing Interest in Hygiene.

At the late meeting of the Louisiana State Medical Society, the Committee on State Medicine reported through its chairman, Dr. S. E. Chaillé, of New Orleans, that it had placed in the hands of Judge Sery the following subjects, to be elaborated into bill form, and presented to the General Assembly:

Law for the creation of a State Board of Health, whose members shall be selected from the various districts of the State.

Law requiring the teaching of hygiene and elementary physiology in the public schools.

Hardness of Hearing in Children.

Dr. Gellé, of Paris, has discovered that about 20 to 25 per cent. of school children can only hear within a limited range. It has also been noticed that the poorer classes of children are specially liable to this affection, the fact being explained by the want of attention to trifling ailments of the ear. In France a practical result has ensued from the above observations, it having been arranged for children to be placed at a distance from the teacher's desk which would correspond with the strength of their hearing.

Pepper Succeeds Stille.

At a meeting of the Board of Trustees of the University of Pennsylvania, held on June 3, Dr. William Pepper was elected to the Professorship of The Theory and Practice of Medicine, rendered vacant by the resignation of Dr. Alfred Stillé.

Items.

—In the *London Med. Times*, Dr. Herbert Collier recommends the local application of sulphurous acid in lupus vulgaris.

—Dr. H. R. Davenport, of Nanticoke, Pa., is reported to have fallen dead recently while engaged in dressing a wound.

—In the *Peoria Med. News*, May, 1884, Dr. Robert Boal reports the case of a woman who had retained a glass pessary in her vagina for twenty-one years.

—The state of Texas has virtually declared non-intercourse with all ports and places south of 25° north latitude, and Matamoras quarantines all travel by land from points south.

—A young man has died in England, probably from tetanus, the sequel of a wound of the elbow received in a struggle with a panther in China some months previously.

—An attempt is being made by some of the American Prison Societies to establish at Washington a permanent central office for the collation of the criminal statistics of the United States.

—Professor Purjesz, of Buda-Pesth, states that he has found Friedländer micrococci of pneumonia in other diseases, and has not always found them in pneumonia. He denies the infectious character of the disease.

—A case showing the importance of an efficient inspection of meat markets, is recorded from England. Four children and their parents were seized with violent illness as the result of eating calf's liver, and one of the children, aged nine, died. It was found on investigation that the liver came from an animal which had been slaughtered for disease.

—In the *Brit. Med. Jour.*, May 17, 1884, Dr. Arthur E. J. Barker reports a case of aneurism of the popliteal artery, cure by digital compression in six hours and a quarter, after failure of instrumental compression and ligature.

—It is said that by the following simple method almost instant relief of ear-ache is afforded: Put five drops of chloroform on a little cotton or wool in the bowl of a clay pipe, then blow the vapor through the stem into the aching ear.

—The Naval Museum of Hygiene, in Washington, although of recent growth, will be found to possess an interesting collection illustrating sanitary science, together with a good library. The National Museum and the Museum of the Department of Agriculture contain also much that is of interest to members of our profession.

—In the *Brit. Med. Jour.*, Dr. Dobson relates a case of early maternity. A girl who began to menstruate at eleven years of age was delivered by forceps of a male child in February last, being at that date thirteen and a half years of age. She had, therefore, become pregnant at the age of twelve and three-fourths years.

—The *Med. Press* says that no case should be given up as an incurable in which only single remedies have been employed. It often happens that syphilitic patients who exhibit no kind of improvement under iodide of potassium, will get rapidly well if submitted to the influence of mercury; and many other instances might be cited.

—An attempt to isolate the bacillus of enteric fever will probably be made under the stimulus given by the munificent offer of a Fellow of the Linnean Society of New South Wales, to give a prize of \$500 for the best essay on "The Life History of the Bacillus of Typhoid Fever." Compositions must be written in English, and delivered at the Society's house by December 31st next.

In Dalldorf, Germany, a monster was born with the following peculiarities: It was a boy, and lived fourteen hours; it had 16 fingers, eight on each hand, thumb and little finger being double, but the two parts were grown together, and the other fingers were united by a web; otherwise nails and joints normal. It also had sixteen toes, crooked and with joints not fully developed, but nails and single toes plainly discernible. The face evinced a cleft palate, but the most remarkable fact was the utter want of a tongue, while two teeth each were present in front in the upper and in the lower jaw.

QUERIES AND REPLIES.

G. W. S., M. D.—From the brief and imperfect history of your case given (*MED. AND SURG. REPORTER*, May 31, 1884), would infer that the pain in stomach was of a gouty origin, after excluding chronic inflammation and cancer. Would treat the case by *restricting and selecting* the diet in the most careful manner, with reference to amount and digestibility (for more than likely she is a high liver); by the use, internally, of guaiacum and colchicum combined, and given in whisky, or whisky and glycerine; of bromide of lithium given in four parts simple syrup and one of syrup of ginger; all to be given in the usual doses of the agents, and each combination to be given three times a day; and of *French thapsia plaster* as counter-irritant over stomach. Keep up a more or less constant crop of pustules on epigastrium with plaster. Beware of the use of morphia or chloral in such a case, lest you worse your case rather than better it in the result. L. N. DAVIS, M. D.

Farmland, Ind., June 2, 1884.

DEATH.

JONES.—Wednesday morning, April 30, 1884, Dr. H. G. Jones, of Evansville, Ind., in the sixtieth year of his age.

THE MEDICAL AND SURGICAL REPORTER.

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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

ON PAROXYSMAL FEVER—NOT MALARIAL.

BY J. H. MUSSER, M. D.,

Physician in Charge of the Medical Dispensary of the Hospital of the University of Pennsylvania; Pathologist of the Presbyterian Hospital.

(Concluded from page 738.)

Not only must pent-up or forming pus be considered a factor in the causation of a periodical fever, but confined serum or forming serous exudation may undoubtedly give rise to intermitting fever. A case of subacute pleurisy with effusion, in which there occurred, in the course of the disease, distinct intermitting fever, came under the writer's notice. The usual evening exacerbations were present, but in the morning the temperature had fallen to, or almost to, normal. So marked were the paroxysms that an empyema was suspected, and doubt only removed by paracentesis, proving the effusion to be serous. Two similar cases have come to his notice in private practice, both in children. The one, a lad 11 years old, had a dry cough for three weeks, with afternoon malaise and fever. The attendant ordered quinine with but little benefit. An examination of the lungs revealed a large collection of fluid in the left pleural sac, which rapidly disappeared under treatment. The temperature was recorded but once daily for obvious reasons, but at times in the morning, again in the evening. Invariably an evening rise, a morning fall, were noted; but it never ranged higher than 102°, and there were no profuse sweats following. From the rapid disappearance of the fluid, and the speedy renewal of

the lad's health, the effusion was called serous, and not purulent.

It may seem very trite to record such simple cases, but when, only lately, a child was seen in consultation, ill from a supposed meningitis, but truly so from an actual serous pleuritic effusion, one should feel that nothing is commonplace, and that it is the little things that need to be constantly dwelt upon. With this remark it may be stated that the fever of pneumonia may be intermitting. Later in the paper, cases of catarrhal pneumonia will be referred to; but now the croupous variety is considered. Four cases, all in children, are recorded in the writer's note-book. Two of the cases were in his care from the first; two were attended by other physicians, coming to him later.

In the first case he was egregiously deceived. The child, *æt.* 4, for five days was well, to all intents and purposes, in the morning, eating and playing about, with possibly only a slight cough. In the afternoon the temperature would rise to a great height (104 $\frac{3}{4}$ °), and the child would be sick until midnight. Repeated examinations of the lung could not detect a pneumonia until the fifth day. He was misled by the absence of dulness and of bronchial breathing, and the occurrence of tympany over the affected lung, as has been rarely noted.

Case number two, of the same character, occurred in a girl 7 years old. A chill, followed by high fever, with nausea and vomiting, substernal pain and cough, marked the onset. Seen the third day, her temperature in the evening was 104 $\frac{1}{2}$ °, with the above symptoms intensified, and a very rapid pulse (140) and rapid respiration (48).

Both the fourth and fifth days the temperature was normal in the morning, high at night. On the fifth day bronchial breathing was first noted at the right base; on the seventh day, dullness; on the ninth day resolution began; after the fifth day the fever was continuous. It seemed like a case of retarded pneumonia—as regarded physical signs—according to the observation of Dr. Andrew Clark.

Following the outline indicated by Murchison, the next form of intermitting fever he discusses is that due to endocarditis. The following case* of ulcerative endocarditis, the febrile range of which was characterized by daily paroxysms, is of interest. There was no difficulty in recognizing the nature of the affection.

TEMPERATURE RECORD.

	A. M.	P. M.
21	1—	103 $\frac{2}{3}$ °
22	100 $\frac{1}{2}$ °	101 $\frac{3}{4}$ °
23	98 $\frac{2}{3}$ °	99°
24	98°	105 $\frac{1}{2}$ °
25	97 $\frac{1}{2}$ °	103 $\frac{1}{2}$ °
26	99°	103°
27	99°	100 $\frac{3}{4}$ °

The writer observed it during life, and deems it worthy of being recorded in this connection.

It would be a great surprise to know how many persons in the latter stages of phthisis, when giving a history of their complaint, say that it was preceded by malaria, or malaria broke them down. Over and over again is such a sad tale told us in the medical dispensary, and it is a matter of fact that not only do the laity, but many physicians, consider early cases of phthisis as malarial in nature, entirely overlooking the local troubles. When speaking of catarrhal fever, the subject will be adverted to again, but the cases of tubercular origin are sometimes none the less examples of intermitting fever, non-malarial. Repeatedly my notes show cases that had been treated for malaria in the early stages. Not only in the formation of tubercle in the lungs, but also in the brain, is the process accompanied by daily paroxysms of fever at times. One case that came under notice was particularly impressive.

The attending physician was going out of town for the summer, and left in the writer's care a little girl five years old, in the fourth week of her fatal illness. She had always been a bright child, of nervous temperament and tubercular diathesis. The illness was of four weeks' duration, marked in the early period by failing in flesh and strength; in the latter period by a chill or chilli-

ness every evening, followed by a night of restlessness and fever. She never complained of headache, nor did she vomit, while her bowels were regular. Eight days before the present attendant saw her, her physician visited her, and attributed the symptoms to malaria; quinine was used. Four days thereafter headache began. The day the writer saw her (fourth week), she had had a slight convulsion and other unmistakable evidences of tubercular meningitis, of which she died in seventy-two hours.

How terrible to be compelled to tell a fond mother the innocent malaria only simulated the baneful meningitis! The writer once made the mistake of attributing a periodical headache to malaria; tubercular meningitis was the cause of the pain. It is seen then, and is well known, that many manifestations of that disease are periodical.

The succeeding case of chronic hepatitis with enlargement, illustrates that form of intermitting fever which is hepatic in origin. The diagnosis was made without difficulty, especially the differentiating from intermitting fever of malarial origin. The following abstract of the history includes all the important points:

George W.,* *æ.t.* 43, German farmer, of Manayunk, contracted diarrhœa during the war, which has always shown some tendency to return. Has had malaria; probably has had syphilis; otherwise been very healthy. Family history good. Admitted September 2, 1877, with well-marked jaundice; emaciated, and presented the symptoms of itching, dark-colored urine, languor and sleepiness, and a small, slow and feeble pulse.

The jaundice appeared gradually in February of 1877, preceded by several days of diarrhœa. Since then marked dyspeptic symptoms, relieved by attacks of diarrhœa; stools at times clay-colored, at times normal. Some œdema of feet, but ascites never detected. October 2, liver from fourth interspace to two inches below margin, on deep percussion, margin smooth and resisting; no pain or tenderness. October 15 to 25, uncontrollable hicough. Extreme exhaustion, rapid emaciation, deepening jaundice, semi-typhoid state; death, November 4. Autopsy revealed the diagnosis to be correct.

The temperature record is noted with the remarks of Dr. Guiteras, whose resident physician the writer was at the time, on its curious range, in order to associate the case with a paper on fevers.

*Trans. College Physicians, Keating.

*Trans. Path. Soc., 1878.

	Morning.	Evening.
October 21	100°	98°
" 22	98°	103°
" 23	95 $\frac{1}{2}$ °	100°
" 24	101 $\frac{1}{2}$ °	96°
" 25	93°	101°
" 26	95°	94 $\frac{1}{2}$ °
" 27	103°	98°
" 28	95 $\frac{1}{2}$ °	100°
" 29	97°	98 $\frac{1}{2}$ °
" 30	97°	98°
" 31	94 $\frac{1}{2}$ °	96°
November 1	99°	93°
" 2	95°	96 $\frac{3}{4}$ °
" 3	91 $\frac{1}{2}$ °	91°

"I find that every third temperature is pretty regularly a high one, the fall being very great in the two intervening temperatures; so that the rise and fall do not present the usual relations to the morning and evening hours. The curious range of temperature may be due to an intermittent absorption of effete products from the liver, or an intermittent arrest of the oxygenating processes going on in the liver, an arrest that must influence the general temperature, if we remember that in health the temperature of the organ reaches 106°."

In another paper* of the writer may be found reported a case of primary cancer of the gall-bladder.

Early, in fact almost until death, the attending fever was thought to be of malarial origin. The writer, as well as others, made the mistake. Until a few months before her death the fever was distinctly intermittent, with chills; later it became remitting, and then continuous. Although there were jaundice and occasional attacks of vomiting, there were no special evidences of localized disease. The spleen was enlarged, and so it was thought to be a miasmatic fever. The change in type, the extreme exhaustion, and the emaciation, caused this idea to be abandoned. Until death it was obscure. A sufficient cause for the temperature range was found at the autopsy in a suppurative inflammation of the bile ducts, and the healthy portion of a gall-bladder, the remainder of which was the seat of carcinoma. One can see now that more stress should have been laid on the occasional vomiting, the slight hepatic tenderness, the previous history of biliary colic, the persistent and deepening jaundice, and the great emaciation, and thereby a diagnosis been made between miasmatic fever and suppurative fever.

Here will briefly be recorded two cases illustrative of the fever of hepatic origin, not because of one difficulty in their recognition, but because one

of them, the first, had been treated for malaria.

This one was the case of M. Mc., æt. 50, who suffered at irregular intervals, often repeatedly in a week, with attacks of severe pain in the epigastrium accompanied by a chill and followed immediately by fever and sweat, and in a few days by jaundice. He died several months afterwards in the writer's care, of obstructive jaundice from impacted calculus, after two of these attacks in succession.

When these attacks occurred every day or every second day, it can be readily seen how a mistake in diagnosis could have been made. Attention to details, however, with the therapeutic test, would have been good aid. The paroxysms, by the way, were no doubt due to the irritation of the discharging calculus. The other case was that of an impacted, possibly ulcerating biliary calculus. The history of the case, the jaundice, and the local inflammatory changes, prevented one from erring.

In addition to the preceding examples of paroxysmal fever, a series of cases will be adverted to which Murchison has not referred to in his lectures, and with the nature of which it is of the utmost importance to be perfectly familiar. Reference is made to catarrhal inflammations of pulmonary, the gastro-intestinal, and the genito-urinary mucous membranes, with secondary intermitting fever resulting therefrom. Especially important is it, for unless the fever is traced to its source, grave organic mischief will become so pronounced as to lead to disastrous consequences. Witness a phthisis following an overlooked bronchial catarrh.

It savors much of the teachings of Broussais, to say that catarrhs are the source of fevers; but there is no doubt that just so far as the philosophic Frenchman erred in that extreme, so do we at the present day err in the other, by attributing most fevers to a zymotic process. Prof. Pepper,* in a timely and instructive address, calls attention to these dangers: That fever is too often considered as due to a zymosis; that zymotic diseases are of self-limited duration; hence that active treatment is of no avail, and especially that the accompanying catarrhs are neglected. Further, on account of these beliefs, the catarrhal process that is often the cause of a fever is overlooked, and thus the commencement of serious local disease is not thwarted.

Reference was made, in another portion of the paper, to the frequency of assuming early tuber-

* Path. Soc. Trans., Phila., '81.

* On some of the relations of catarrhal affections. Trans. Am. Med. Assoc., 1881.

cular disease of the lung accompanied by intermitting fever, to be due to a miasmatic fever. The following notes illustrate the clinical course of some cases of catarrhal disease of the air passages, which often are the forerunner of so-called catarrhal phthisis. Other examples have been noted, in which here have been only slight catarrhs, without hemorrhage, much cough or emaciation, with attendant fever, occurring in paroxysms.

One of the most typical cases of paroxysmal catarrhal fever came under observation in August, 1880, and was the first to lead to the investigation of this question.

A man, forty years old, of previous good health and habits, of good family history, and residing in a healthy neighborhood, sought advice for "chills." Daily, at 11 a. m., he would have a chill, followed by fever and sweat. The entire paroxysm continued until 6 p. m. His digestion was impaired, and his bowels were constipated. The usual treatment was employed. He reported twice that the chills had ceased to return at once when the medicine was finished. He also reported that his sweats continued throughout the night, and that he was losing flesh and strength. At the third visit, he was much dissatisfied, for a former slight cough had grown more pronounced, he had bloody mucous expectoration, and the chills continued. Upon careful examination, a distinct area of consolidation at the root of the right lung with attending blowing breathing, and some sub-crepitant râles, were found. Active treatment was determined upon, and in six weeks the patient was cured. He has followed his occupation ever since (engineer), is heavier than he ever was, and in perfect health.

Further: A young miss of twenty years, the past winter, was conducted through an attack similar in many respects. Originating in a severe cold, with harassing cough, chest pain, no expectoration and with loss of appetite, nausea and constipation; she lost flesh, and had, the first two weeks of her illness, daily morning chilliness, fever in the afternoon (102°), followed by an exhaustive sweat. During this time the physical signs of a bronchitis were present, with marked localization of the inflammatory process at the right apex. A day of undue exposure and exertion was followed by a severe chill and rapid rise in temperature, with distinct evidence of catarrhal pneumonia at the location indicated above. Chills and fever daily, profuse sweats, emaciation and gastric derangement, were prominent for two weeks. The former symptoms then subsided, but

it was fully two months before the lung cleared up, and the patient gained flesh and strength. The family and friends constantly reiterated their opinion that the attack was primarily malarial.

Probably the most difficult, the most occult form of paroxysmal fever of catarrhal origin to recognize, is the one due to that lesion of the intestinal tract. There are no physical signs to betray it, and generally the intestinal derangement is considered secondary to the febrile process. It seems impossible to distinguish the specific from the catarrhal form, save by the presence or absence of the enlarged spleen, the change in the urine of malarial subjects and of the blood when the malaria is chronic, especially when a recent writer tells us that epigastric pain, vomiting and constipation, are symptomatic of malaria in children. The following record is a typical illustration of this variety, and is a most instructive and pertinent case:

E. M., æt. 5. Inherits a tubercular diathesis from mother. During November and December of 1881, had no appetite, was obstinately constipated, and lost flesh. She became delicate and puny-looking. The latter part of December she was seen on account of the above symptoms and of an irregular fever. The course of the fever was at first difficult to determine, but finally it was found to be distinctly intermittent. She was visited at various hours of the day, and found that at 11 a. m., daily, she would be cold, shivering, and begging for extra covering. Her extremities, nose and ears would be very cold, her lips bluish, and the features pinched. At the same time the pulse would be rapid and the temperature in the mouth 102°. In a half hour the exterior warmed, and very soon she would have high fever, the temperature rising to 103°-103½°. The febrile stage lasted three or four hours, and was not followed by profuse perspiration. Save being weak and without appetite, by night she would be perfectly well. Quinia was given in continuous doses at first, afterwards in doses to anticipate the paroxysm; but without any good effect. The paroxysms were lessened in severity only, while the already poor appetite was made poorer and the digestion more impaired; for two weeks an anti-periodic treatment was continued, and at the same time laxatives were used to overcome the constipation; at this time (January, 1882,) she was thin and worn, the paroxysms of fever were daily, the appetite was very poor, the breath offensive, the tongue covered on the dorsum with a yellow-white fur, pointed, and with no papillæ; vomiting occasionally occurred, and always some pain after eating;

the bowels remained obstinately constipated. It seemed to me, after a time, the fever was a secondary matter; that the gastro-intestinal disorder was primary, and that such disorder was subordinate to the diathetic constitution. Hence she was placed on small doses ($\frac{1}{8}$ gr.) calomel with bicarb. of soda (5 grs.) every three hours. In three days cod-liver oil with syrup of the hypophosphite of lime was added to the treatment. At once she began to improve; her appetite first, then her bowels, became more regular. In two weeks the child rapidly improved under this treatment, after being treated previously for more than two weeks for malaria. It may be added here that twice or three times E. became constipated with similar febrile symptoms noted above, and that the parents, without my advice, cured her with the cod-liver oil mixture.

A case very similar to the above was also seen. It is useless to report the details of the case; remedies directed to the gastro-intestinal catarrh, with accompanying intermitting fever, effected the cure.

A case of stricture of the pylorus, in its course, at one time presented daily chills and fever. Quinia did not control the paroxysms. During the time of the fever, and for a week afterwards, the stools of the patient were composed of mucous or membranous casts of the intestinal canal, or of a pultaceous mucoid discharge.

These cases incontestably prove the proposition that intermittent fever is often due to catarrhal inflammation of the intestines, and that remedies directed to this locality alone will cure the disease.

This clinical record will be closed by the report of an observation of a case, the nature of which is somewhat obscure. It is not given, therefore, without some misgiving. It appears that the only title that could be applied to it would be paroxysmal fever of neurotic or hysteroidal origin.

The patient was twenty-five years old, of a rheumatic diathesis and nervous temperament. She presented a history of "chills and fever," recurring at irregular intervals for two years. The paroxysms were of the quotidian type and the attacks lasted one or two weeks. Considered to be malarious; quinia or cinchona was always given by her attendant, and the usual remedies for malarial toxæmia used, without cutting short or preventing the attacks. The writer attended her through two attacks. They were of the following nature: Preceded by dyspeptic symptoms for a few days, a violent chill attended the onset of the attack, accompanied by severe headache, with tender spots, and one or more localized points of

pain in the body. In one of the attacks the pain with the first chill was fixed at the end of the spine with exquisite tenderness; in another, it was in the epigastrium. The chill was an hour in length, and followed by fever. With the fever the face would flush, the eyes "burn," and the skin be hot and dry. The temperature would rise to 103° or more, the pulse be full, bounding, rapid. Evidences of gastric catarrh, with constipation, were also noted. During the paroxysm, the most pronounced emotional disturbances were manifest, so that had fever been absent it would have been without difficulty considered a case of hysteria. A sweating stage of two hours followed the fever.

The paroxysms recurred daily for a week, but with the repetition of each one the pain would be seated in another portion of the body—in the occiput, the shoulder, or the knee-joints—while the emotional disturbances would be also present. The pain was described as unbearable, and could not be influenced by almost incredible doses of the usual anodynes. Quinia was given in enormous doses in the first attack, without any beneficial influence.

The fact that the paroxysms occurred towards night, and that they were accompanied by hysterical symptoms of a high degree, the inutility of quinia and the absence of enlarged spleen, rendered the opinion that the case was of neurotic origin, probable.

The second attack was very similar. Vomiting was, however, a more persistent symptom. The duration was about one week, and it appeared to yield to remedies addressed to the hysteria and the gastric irritability. The whole tenor of the patient's life has changed since then, so that for two years she has not had a return of the supposed malaria, notwithstanding she is exposed to the same malarious influences.

Time will not permit a review of the various affections in detail, in order to establish a differential diagnosis between these simulative disorders and a true intermittent. Any attempt at a positive diagnosis of paroxysmal fever, however, should not be made without keeping in mind the following proposition: In the first place, one would say that given a case with a chill and fever, a diagnosis of intermittent ought not be made from the nature of the first paroxysm, unless it be vital to do so, as in a pernicious intermittent. Then, if such a case is presented that yields but partially to anti-periodics, they should be discontinued and a fresh start in the diagnostic inquiry taken.

In order to fully establish a diagnosis, a careful study of the antecedents of the patient should be made relative to previous health, habits, place of residence, and family history. Then, in favor of malarious intermittent, we should, after this study, expect a morning hour for the chill (Flint), the well-known changes in the composition of the urine, and if chronic, the enlarged spleen and the pigment granules in the blood. If with one or more of these favorable factors present we could exclude all possible source of organic disease, by an examination of each individual organ, the blood (leukæmia), the eye ground (tuberculosis), the lungs, liver, and gastro-intestinal tract, we would be warranted in the diagnosis of malarial intermittent.

It seems, further, to be of value to note that emaciation of a high degree is more common in non-malarious intermittents.

The same may be said of exhaustion. The latter occurs to a certain degree, and is attended with a pronounced anæmia, so easily recognized as of malarial origin. Then, too, a long sweating stage and a low febrile range rather disprove the presence of the malarious influence.

Enlargement of the spleen is not to be considered, in acute intermittents, as of little moment. In a series of twelve cases of intermittent in children, eight presented the enlargement, which had subsided a year after the first examination.

There is but little doubt that fever is of neurotic origin, and the examples which have been recorded to-night more aptly illustrate this cause than any other class of cases. The profession is so thoroughly imbued, however, with the idea of no fever, unless a zymosis or blood-poisoning, that it is of practical value to refer to the mechanism of fever briefly. As shown by others, disastrous results oftentimes ensue by addressing means to the cure of a zymosis, or by passively allowing a febrile process to continue its supposed self-limited course, when actually a zymosis was not present, and remedies otherwise applied would have been beneficial. The reference to the mechanism, therefore, is to show that often fever is of a reflex origin due to peripheral irritation—a neurosis.

The element of intermittency itself is a powerful argument in favor of its neurosial origin. This is not the time to engage in philosophical speculation, or to demonstrate the relation of the fundamental principle of the rhythm of motion so grandly elaborated by Spencer; suffice it to say that to no other set of tissues or systems could we look to but the nervous system for an explanation of intermittency. Aside from this,

however, in the masterly study in morbid and normal physiology by Wood, on the mechanism of fever, we find sufficient argument and proof "that a depressing poison or a depressing peripheral irritation acting upon the nervous system which regulates the production and dissipation of animal heat," causes fever.

Among the illustrations presented to night, there are some which strongly indicate the reflex origin of fever from peripheral irritation; witness the case of vesical calculus or of gall-stone. By what other supposition could the phenomena be explained? Likewise, though with an element of doubt intermingled, in the cases of gastro-intestinal catarrh, the fever may be considered as due to reflex processes. In the other cases, the fever is, no doubt, due to the absorption of a poison which acts upon the nervous system; and as opposed to Charcot and Billroth, one would think that the phenomena of intermittency are due not to paroxysmal discharges of pus or poison into the blood, but to rhythmical responses of the nervous system to a constantly-acting poisoned blood.

3705 Powelton Avenue.

NOTE ON A SPECIMEN OF INTRA-CAPSULAR FRACTURE OF FEMUR WITHOUT UNION.*

BY HENRY LEAMAN, M. D.,
Of Philadelphia.

Mrs. Mary A. Nugent, aged sixty years, fell, January 23, 1884, while attending her household duties. Was not dizzy at the time.

I saw her first January 24, 1881; she was then lying on a settee, but was unable to stand or move about. On examination, from the preternatural mobility intra-capsular fracture was diagnosed. My attendance was continued at intervals during the months of February, March, April, and May. She was unable to help herself in any way; by help she could be gotten on a Charleston chair, and this was the only treatment attempted. The most of her pain was in the adductors; there were shortening and eversion of toe.

She continued in the same room and on the same settee and chair until I was called to see her, January 6, 1884, when I found her dying from exhaustion. She died January 8, 1884. Privilege was granted to examine the hip. The specimen here presented was obtained. The acetabular cavity was normal in appearance. The

*Read before the Philadelphia County Medical Society, March 19, 1884.

head of the femur lay in the cavity free. The socket and head of the bone were covered over with a membrane, firm but somewhat incomplete. Upon this surface the upper extremity of the femur had formed an artificial joint, the neck having been absorbed. In the surrounding tissue on the inner side was a fragment of bone one and one-half inches long.

This case has no special interest, except, perhaps, in the fact that the head had undergone fatty degeneration, and that the patient made so little progress towards locomotion, never being able to walk on crutches. Doubtless degeneration in other parts of the body caused her death. But no further post-mortem was granted.

HOSPITAL REPORTS.

NEW YORK HOSPITAL.

CLINIC OF PROF. WILLIAM H. DRAPER.

Reported by W. H. SEELYE, A. M., M. D.

Iodism and Zoster.

(GENTLEMEN: This is the patient whom you saw some time ago suffering from an iodic acne and eczema of the legs (see page 523). He came into the hospital with the lesions of constitutional syphilis, for which he was successfully treated by the mixed treatment; and after the disappearance of the syphilitic lesions, the treatment with iodide of potash was continued, until the specific physiological effects of the drug manifested themselves in the production of a cutaneous eruption. And I called your attention at that time to the fact that this was an illustration of the effect which iodine sometimes has upon the nutrition of the skin. He has been here ever since that time. Though he got well of the eczema upon the withdrawal of the iodine, yet he remained here because of a furunculosis, which seems to have been another consequence of the iodism.

Last Saturday night, about five days ago, my attention was called to him, and I found him suffering intensely from a neuralgia, which he referred to the lower part of the right side of the chest, and to the upper abdominal region. I found no lesion in the chest or abdomen to account for the pain, and so I looked upon it as a simple neuralgia, and gave him morphia to relieve it. The pain recurred on Sunday, and so in addition to the morphia to relieve the neuralgia, applications of poultices and turpentine were made to the skin, for the purpose of exciting counter-irritation. On Monday night I found that the amount of counter-irritation produced was in excess of what had been expected from the remedies, and so they were withdrawn. On Tuesday night I observed groups of vesicles over this region, which appeared more distinct than they are now, though they were partly concealed by the hyperæmic condition of the skin. And at the same time the pain was so severe, as to cause him to scream out when touched.

Yesterday it was less so, but still large quanti-

ties of opium were necessary to make him comfortable. The pains were of the characteristic neuralgic character, were sharp, shooting, or lancinating, and were aggravated by movement or by taking a long breath; so he held the right side of his chest almost perfectly still in breathing. Yet there was no sign of any lesion in the chest or abdomen. The neuralgia was in fact in the skin; and it is a neuralgia of the lower dorsal and upper lumbar nerves. This remarkable effect of counter-irritation is one that is sometimes observed, and especially in that form of neuralgia of the trunk and extremities which is attended by a vesicular eruption, and which is called herpes zoster. The eruption is vulgarly called "shingles," from a corruption of the Latin word "singula," meaning a belt or girdle; and it is so named from the fact that the eruption sometimes forms a partial girdle around the body. But this does not often happen. Zoster is usually unilateral, but it occasionally occurs upon both sides, and in such cases the extremities may so nearly approach one another as to form a nearly complete girdle. It was said formerly that if the eruption was upon both sides, it was always a fatal disorder. But it is doubtful if by itself, alone and uncomplicated, it is ever fatal. It is a very painful, but as a rule, I think, a very benign disease. It is one of the most satisfactory illustrations of the trophic disturbances of the skin, which sometimes occur along with disturbances of the sensitive nerves, which we have. The cause of this disease is not well understood, some thinking that it is due to peripheric irritation, and others that it is the result of some central irritation. But that it is due to an irritation and congestion of the roots of the spinal nerves is, I think, the most generally adopted belief of the present day. This neuralgia may occur in many localities, such as in the head and in the branches of the fifth nerve in all three of its distributions, and also in the distribution of the cervical nerves to the neck and shoulders, and lower part of the scalp, and also in the trunk and limbs. Pain is the prominent symptom at first, and is what especially attracts attention. It is sometimes only of moderate severity, and this is the rule particularly in the young. In them and in healthy adults it is not apt to be very severe. But after middle life, and especially in old and feeble people, it is one of the severest kinds of neuralgia that you will ever meet with. But the neuralgia itself does not always disappear after the eruption has disappeared; and even after every trace of the local disturbance has gone, the administration of opium is sometimes needed. The eruption is therefore only an incident of the disease, and not an essential of it; but the lesion itself is in the roots of the spinal nerves, and so the pain may persist long after the trophic disturbance of the skin has entirely subsided. Locally all trace of eruption is apt to subside, in a young and vigorous patient, within a week or ten days; but in the old, and in feeble persons past middle life, it is not always so simple an affair. For in such patients I have seen the vesicles become filled with a sanious fluid which underwent decomposition, and thus the parts affected became the seat of a gangrenous inflammation. But this is liable to occur only in debilitated and broken-down pa-

tients, and you do not expect it in healthy adults. But the greatest suffering is from the neuralgia, which may precede the eruption, and continue while it lasts, and persist for weeks or months after it has disappeared. This case is not a good illustration of zoster as you usually see it: for here we have in addition another dermal lesion, from the application of a vesicant to the skin, which obscures the proper lesion of the zoster. The disease is now subsiding, and the man is suffering less pain.

In regard to the treatment of this malady, I regret to be obliged to say that it is for the most part palliative, and I do not know as you can do much except to relieve the pain. Quinine and opium, and all the measures which you would adopt in the treatment of any other case of neuralgia, should be tried. Occasionally I have seen belladonna to the skin seem to do some good; but I do not know that it does, because where I have used it, it has been in connection with opium or other anodynes. On the theory that this disease depends upon a congestion, or an inflammatory condition of the roots of the spinal nerves, it has been suggested that the pain might be relieved by the application of the thermo-cautery along the spinal column. And if this man's neuralgia continues, I shall advise such an application here. I have never tried it yet, for it is a comparatively recent suggestion, so I know nothing as to its efficiency. But in cases like this, where medicines seem of little use, I think it is best to try any new method of treatment which offers any hope of success.

Cardiac Palpitation.

The next patient is a woman, 44 years of age, born in Ireland, a widow, and was admitted to the hospital November 24. There is nothing of importance in her family history. She has had three children, all of whom are dead. One died in utero, and the last one died three and a half years ago. Seven months before admission her menstruation ceased, but it returned after a time; and then it stopped again, and she has not menstruated for the past four months. She has been subject to occasional weak spells. Six or seven years ago, she had an attack of rheumatism in the foot, which lasted two months. She does not use alcohol in any form. Four months before admission she was taken ill, and she was told that she had kidney disease. She complained of pain in the back and hips, of cardiac palpitations and a sense of oppression in the chest, and of attacks of vertigo and ringing in the ears, of floating specks before the eyes, and of a slight cough. These symptoms have been constantly increasing. Her bowels and micturition have been normal. On admission her pulse was 96, respiration 22, and temperature 101°. Her urine was amber-colored, of an acid reaction, of a specific gravity of 1.020, and it contained a slight trace of albumen, and a few leucocytes, but no casts.

Gentlemen, I want you to observe the charts which contain the record of the vital signs in this case, from the time of her admission until now; because this is a good illustration of a disorder which you will meet with almost every day of your life, and with which you will at times be much puzzled. The most striking feature of this record is the extreme frequency and

irregularity of the pulse. And most of the symptoms can be explained by the great irregularity in the circulation and distribution of the blood, which this sort of heart action necessitates. Cardiac palpitation is a very common disorder, and it is sometimes only a transient symptom, which disappears with the cause. And this may be indigestion, great emotion, excitement, anger, grief, or sudden loss; and when the cause, whatever it is, passes away, ordinarily this disturbance of function disappears also. It is not always, however, a transient phenomenon, but it is sometimes a persistent one, and the source of great distress. And these cases of persistent palpitation I have observed under a great variety of circumstances. I have noticed that this persistent irregularity of the heart may come from a great nervous shock. For example, I have known it to occur in men who from a condition of affluence had suddenly become paupers. Or it may be the result of great grief or a sudden fright, and these emotional disturbances are sometimes the cause of persistent as well as transient palpitation. And you should bear this fact in mind. Age will have an influence over the occurrence of this persistent palpitation, and sometimes it is connected with that critical period in a woman's life which is known as the menopause; and I have seen a considerable number of such cases. In fact at the period of menopause you are very apt to have in many women marked disturbances of the circulation, and this manifests itself in irregular action of the heart, and in transient congestions which are evidenced by sudden flushings of the face, dizziness, tinnitus aurium, *muscae volitantes*, and hallucinations of sight and hearing. These cases are sometimes associated with that particular form of palpitation which was long ago described by Graves and also by Basedow at about the same time, in which you have also a disturbance in the circulation of the thyroid gland, and in the loose connective tissue just behind the eyeballs. This triad of symptoms was so frequently found together by them, that they looked upon this association as constituting a special form of disease, and so in honor of them it was named Basedow's or Graves' disease.

Now, it is a mistake to suppose that this association of symptoms is essential to Graves' disease, and Basedow's disease, for the essential element is the disturbance in the blood and circulation, which is manifested by this extreme frequency and irregularity of the heart. The enlargement of the thyroid gland is a frequent but not a constant symptom, and the same is true of the exophthalmic enlargement. For there may be an irregular action of the heart accompanied by an enlarged thyroid gland, but with no exophthalmos; or there may be exophthalmos and no thyroid enlargement; or both may be absent and the disturbance of the cardiac circulation may be the only evidence of the disease. Or if both the thyroid enlargement and exophthalmos have been present, one may disappear for a time, while the other persists.

Now, I have mentioned emotional disturbances and the menopause as the common causes of this condition; but they are not the only ones. It would seem sometimes as if this derangement of the nervous energies which control the circulation

occurred in connection with simple anæmia in men and women both. And it also sometimes occurs in connection with organic heart diseases, but this is not essential to its occurrence. But as a result of this increased frequency of the heart's action, you do frequently get a cardiac hypertrophy.

Now, here is a woman 41 years of age, who is evidently passing through the menopause, and this disturbance of the circulation has occurred to some extent in her. When she came in she had this extreme irregularity of the pulse and respiration which you have seen, and some enlargement of the thyroid, and a slight degree of exophthalmos. She has had besides what is occasionally observed in this disease, namely, a slight degree of fever. Her temperature has been above the normal ever since she came in, and at times it has been pretty high. Thus, yesterday, at one time it was 104.5°C, and with this there was a very rapid and feeble pulse, and a frequent and irregular respiration. With her, therefore, the cause of these disturbances seems to be permanent, and not yet under the control of any remedy that has been used. You may ask what is the cause of these disturbances in the vital signs? And I answer, that I do not know. It has been thought by some that it is a disease of the sympathetic system; and careful explorations have been made in the sympathetic system of nerves, in order to find out this cause. And experiments have been made by making lesions in the sympathetic nerves, in order to see if these symptoms can thus be reproduced in animals. In a few cases lesions in the cervical sympathetic are said to have been found post-mortem. It seems probable that the lesion is either one of the central nervous system, or of the sympathetic system; for the disease often occurs in purely nervous subjects, and it also is frequently found in women at that period of life when nervous derangements are most apt to occur, the menopause. But exactly what the nature of the lesion is, is not known.

The prognosis in a fair proportion of cases is good. At all events, some get perfectly well. But some get pretty well and then relapse again, and a few do not recover at all. When associated with organic cardiac affections, you of course cannot expect a perfect recovery, and in pure and simple Graves' disease you do not look for it.

In the treatment of this disorder, the most important element is rest. Putting the patient to bed is a most useful expedient in all forms of palpitation. You know that in a state of health there is a difference of fifteen or twenty beats a minute between the pulse-rate of a person in the erect and in the reclining posture. And this difference is not due simply to the muscular effort put forth in retaining the erect posture; for this same variation of the pulse with the change of posture has been observed in the case of a man who was strapped to a board in such a way that no muscular effort was required for him to maintain the erect position. It is therefore important in all cases to give the patient the advantages of the recumbent position. Some effect seems to be thus produced in the cerebral circulation, which results in increasing the inhibitory action of the pneumogastriæ.

The next important indication for the treatment

is to remove the cause of the disturbance. When it occurs as the result of shock, you cannot do anything to remove the cause. But if the cause is connected with the menopause, you may do something here to give relief, by the use of such remedies as will equalize and regulate the circulation. Digitalis is of very great service for this purpose, and Trousseau even went so far as to say that digitalis is a specific for this disease; but this is not quite true. I have sometimes thought that strychnia was of some benefit. In cases with anæmia, iron in combination with digitalis is of great service. But the great point is to keep the patient at rest in the recumbent posture, and to feed him carefully, so as not to aggravate his sufferings by adding indigestion to his other ailments. And then you should give your attention to regulating the circulation and to the administration of nerve tonics and iron, and if possible to the procuring of refreshing sleep. These are the broad principles of treatment, which are sometimes attended with success and sometimes not. I have known the iodide of potassium to relieve a severe case of palpitation in a lady who came to me for treatment. And it is a remarkable fact in this connection that Trousseau says that under no circumstances is iodine to be used in this malady. I must admit, however, that I have never seen the iodide of potassium do as much good in any similar case since; and I am even in some doubt whether the iodide had anything to do with the improvement in her case; but I am not sure that it did not. I will mention as a curious fact in this connection that the same lady was relieved at another time of a persistent chronic bronchitis by the use of potassium iodide. So perhaps with her this remedy is a specific for many other disorders, as well as those of the circulation. It has not done any good here, nor has digitalis or iron. There is a persistence of the symptoms here which has thus far resisted the influence of all drugs. We can only try to relieve her now by the use of stimulants, and morphia with quinine.

MEDICAL SOCIETIES.

PHILADELPHIA NEUROLOGICAL SOCIETY.

The first stated meeting was held Monday evening, February 25, 1884, the Vice-President, Dr. Charles K. Mills, in the chair. Dr. Mills read a paper on "The McGinnis Case."

A history of the case, including an account of the crime, and a discussion of the formation, proceedings and reports of the commission to inquire into the mental state of McGinnis, was given.

The facts indicating the insanity of McGinnis were summarized by Dr. Mills, in the course of his paper, as follows: A bad family history; evidences of the monomaniacal character, as shown by a study of his life and present condition; the existence of a delusional state, and even of special delusions of a depressive and persecutory type; the presence of hallucinations of hearing and sight, the former being connected largely with persecutive ideas; some manifestations of religious monomania; a history of alcoholism, and the fact that his chief delusion, that of marital infidelity,

was one often found in chronic alcoholic insanity.

The next paper was entitled "Case of Unilateral Spasm, Hemiplegia, and Aphasia, Following Measles in a Child Two Years and Four Months Old," by Lambert Ott, M. D., Assistant in the Nervous Department of the Post-Graduate Course of the Jefferson Medical College.

Boy, aged two years and four months, healthy and intelligent, talked well for one of his years. April 2, he had a mild attack of mumps. Seven days later, he was seized with premonitory symptoms which ushered in a well-defined attack of measles. Other children in the same house were just convalescing from this exanthema. No physician was called, and nothing more was done than keeping him warm in bed and administering an occasional purgative. On the tenth day after the beginning of the disease, the mother states that he felt well, was laughing and playing in bed, but instead of the dull yellowish stains which remain after papules of measles have faded, his skin was dotted with spots of a purplish hue. The same morning the mother noticed a twitching of the muscles of the right eye and right side of face, and soon after similar movements of the right arm and leg. He remained conscious during the spasm, but was unable to speak, motioning for anything he wanted. After the spasm had existed an hour, the leg ceased to move, and was found to be paralyzed. Half an hour later the arm-jerk stopped, and the limb lay powerless by its side; the face movements continued only a few minutes after the arm became quiet, when the side of face was observed to be paralyzed. While the right-sided convulsive seizure was going on, the left arm and leg were affected with choreic movements, which subsided soon after right-sided paralysis was manifest. Two hours after the first appearance of the spasm, I noted the following condition: Ptosis of right eye; no change in pupils, and no disturbance in movements of eye-balls. When he cried the right side of the forehead remained smooth, while the left was markedly corrugated; no paralysis of tongue, but complete *aphasia*. I was unable to investigate the special senses, on account of the age of the child. Motion in the right arm and leg was completely paralyzed, sensation partially. He was conscious, and drank water with very little difficulty. The left side of the body showed no disturbance of sensation or motion, excepting occasional choreic twitching. The dread the child had of strangers prevented me from examining the heart. Temperature, 101°C; pulse, 120; respiration, 20, and very irregular. Some bronchial catarrh.

Second day. Temperature 102, pulse 130, respiration 40. Had no vomiting; intelligence remained good; tongue dry; passed water and feces involuntarily. During the next six days his fever remained high, cough increased, and evidences of catarrhal pneumonia developed.

About the ninth day the mother called my attention to a bulging of the right side of the chest, resembling the deformity produced by a large pleuritic effusion, with a marked lateral curvature of the spine, the convexity being toward the right side; percussion of the lung of this side elicited hyper-resonance, and auscultation, normal breathing with prolonged expiration. The chest deformity was apparently due to contraction of

the muscles of the left side. He had conjunctivitis of right eye, and dribbling of saliva from the right angle of the mouth. Was very irritable, and often carried his hand to his head and moaned. Urine examined and found normal. The choreic movements of left side returned, but were not as marked as at first.

In the second week the muscles of the face began to regain power.

In the third week there were no marked changes in his condition, except a peculiar swelling and tenseness of the paralyzed leg, which persisted four days, and suddenly disappeared during one night; the next morning the leg was very flabby. Electro-muscular contractility was fair. In the latter part of the third week his head was drawn to the paralyzed side, the chin pointing to the left, showing the peculiar influence of the healthy sterno-mastoid and other neck muscles, which was pointed out to me by Dr. Eskridge. The muscles of the right side of the neck were flabby; those of the left side were hard and tense. Lifting the head would place it erect, but when unsupported, would fall into its former position. In the fourth week movements were noticed in the arm, and in the fifth week the leg began to regain power. He was now, for the first time, using a few monosyllables, as *ma*, *pa*, etc.

In the fourth month he walked fairly; used a few more words, especially the simpler ones.

In the sixth month of his disease his general health was good, and he was talking more, but only using such familiar words as children learning to speak usually employ. His gait was fair and he was able to run, but there existed a marked weakness of the flexor and extensor muscles of the anterior part of the right leg, and of the extensor muscles of the right arm.

I look upon the case as one of embolism of the left middle cerebral artery, obstructing the first branch, called the frontal-external and inferior, which supplies the third frontal convolution (convolution of Broca) wherein resides the centre of speech; also the second and third branches, called respectively the anterior parietal of Duret, or the artery of the ascending frontal convolution of Charcot, and the posterior parietal artery, or the artery of the ascending parietal convolution of Charcot. These two latter branches supply the motor centres of the extremities (Ferrier). The fourth branch, which supplies the angular gyrus, was probably not obstructed, as vision remained apparently unimpaired.

The motor centre of the facial muscles occupies a region in close proximity to those of the extremities, which is also supplied by branches of the middle cerebral artery.

There are some marked peculiarities in the case.

First. The age of the patient, two years and four months.

Second. There was no loss of consciousness, which Hamilton says is the exception. In most cases there is either partial or complete loss of consciousness.

Third. The disturbance of conformity of the chest, on the ninth day after the spasm.

Fourth. The falling of the head to the paralyzed side twenty days after the spasm.

Whenever he had a good night's rest, he was

able to hold his head erect for two hours; after that time it lay to one side.

The order of recovery of the paralyzed parts was as follows: First, it is well to recall that the lower extremity lost power first, next the upper extremity, then the face, and later the neck and chest. In order of recovery, the face, neck, and chest showed the first signs simultaneously, then the upper extremity, and next the lower extremity. When considerable power had been regained, quite noticeable yet was the weakness of the extensor muscles of the forearm, which gave the hand the peculiar position that resembles the wrist-drop of lead palsy.

Most interesting of all was the occurrence of aphasia. Here was an active little boy, twenty-eight months old, who talked connectedly and as well as usual for one of his age, is suddenly stricken with unilateral spasm, followed by hemiplegia and total loss of the power of speech. His intelligence did not wane one whit during the whole trouble. When thirsty, he protruded his tongue against the upper lip. If the parents told him the doctor was coming, he immediately manifested great fear, and beckoned for his mother to come near him.

If he wanted some article in a distant corner of the room, he pointed his finger at it and began to whine. When they put their hands on the wrong article, he intensified his whine, by which they understood it was not what he wanted. As soon as they touched the desired object, a smile came over his countenance.

In the fifth week he spoke his first words, as "pa," "ma," and "no." Later, other simple words were added to his vocabulary. The mother, a woman of experience, having had eight children, made a remark which struck me very forcibly, that it seemed to me as if he had to learn to talk over again. At no time did he misapply a word, as calling a "chair" a "table." When once he knew a word and its application, he always used it afterward. At this date (nine months after the attack) his speech is disconnected. If he desires to express a thought, he can make a good beginning, but is unable to finish. For instance, he wants to use the sentence, "Katie, get my hat in the other room!" he can only say, "Katie, get my hat ——" for the rest of the sentence he uses signs. His being unable to finish a sentence is not that he did not know the word "room," for when used otherwise he had no trouble in recalling it. When he used three or four words in succession, his speech powers seemed at an end.

The discussion on Dr. Ott's paper was opened by Dr. Francis Dercum, who said he was inclined to regard the interesting case reported by Dr. Ott, as more likely to be one of hemorrhage than of embolism. It is well known that the miliary aneurisms described by Charcot and others, occur sometimes in the very young, therefore, one of the conditions which leads to hemorrhage may be present in infancy. The absence of valvular disease of the heart was also against the idea of embolism.

Dr. Dercum thought that the symptoms presented by the case indicated a lesion of the internal capsule and basal ganglia, rather than of the convolutions. He referred to the more frequent occurrence of hemorrhage in this region, and

also of the wide extent of cortex that would have been required to be involved in order to explain the phenomena.

Dr. Charles K. Mills agreed with Dr. Dercum that, from the history of the case, the absence of recognized heart lesions, and the age of the patient, the case was probably one of hemorrhage. He believed, however, that some of the facts indicated a cortical lesion. One of these was the existence of choreic movements on the side opposite that which was paralyzed.

According to Duret, when irritative lesions of the cortex occur, they produce not only spasm on the opposite side of the body, but also may cause contraction or spasm on the same side, the result being brought about through irritation of the sensory nerves of the dura mater, which irritation is conveyed to the bulbo-medullary centres.

Dr. Mills referred to the completeness of the paralysis, as a matter of great interest in connection with the views of Broadbent as to the communication of well-worn commissural channels of those parts of the central nervous system which preside over movements of the two sides of the body which are associated.

Dr. James Hendrie Lloyd referred to the remarks which Dr. Ott had made about the angular gyrus not having been involved, and said he was not aware that any well reported cases of embolism affecting the angular gyrus and causing blindness had been published.

Dr. Dercum said that the occurrence of choreic movement on the side of the lesion could be as well explained by the transmission of irritation by means of the commissural channels of the brain, as by the views of Duret.

Dr. Ott closed the discussion, and said in favor of embolism is the sudden appearance of the attack, and an array of symptoms which usually follow an embolus in the left middle cerebral artery. In favor of cerebral hemorrhage is the disorganized condition of the blood as a resultant of measles, predisposing to such an occurrence.

On the conclusion of the discussion of Dr. Ott's paper, Dr. Charles K. Mills read a "Note on the Use of Nerve Pressure for the Relief of Hysterical Contracture."

In three cases, Dr. Mills had resorted to strong pressure, applied, by means of the thumb or fingers, to the trunk of the nerve supplying the muscles affected by the spasm in contracture; in a case of hysterical spasmodic torticollis, and in one of hysterical contracture of the wrist and hand, the condition passed away, and remained relieved; in a case of long-standing contracture at the knees under the effects of pressure on the sciatics the spasm disappeared, but recurred. The procedure was simple, and had value, both as a means of diagnosis and treatment. Whether the effect was produced by mental effect, by causing a temporary paresis, or by the pain, he was not prepared to say.

Dr. Wharton Sinkler spoke of having used the method unsuccessfully in a case of facial spasm, which was not, however, hysterical in character.

—M. Gérard Lagüe (*Lyon Med.*) states that syrup of gooseberry will completely disguise the taste of iodide of potash.

EDITORIAL DEPARTMENT.

PERISCOPE.

Large Doses of Calomel in True Croup.

Dr. O. T. Schultz contributes a very interesting paper on this subject to the *American Practitioner* for May, 1884. He first details the method introduced and extolled by Dr. Reiter, of Pittsburgh, Pa., who holds that that this inflammation is due to "too much fibrine in the blood," which condition is produced by the liver having lost its fibrine-destroying power, and that mercury is the specific for compelling the liver to resume this function. Be his theory right or wrong, Dr. Reiter has put it into practice with great boldness, and with astonishing results. And he anchors his faith fully and squarely upon mercury in all forms of pseudo-membranous inflammation—fibrinous, septic, and gangrenous, sthenic and asthenic—and without ever engaging in those delicate subterfuges, steaming, burning, or cutting. His results are reported to be marvelous, and unattended with any unpleasant after-effects, while the boldness with which he pushes mercury makes one's hair stand on end. Dr. Schultz then goes on to relate the case of his own boy, whom he treated according to Dr. R.'s method. He says:

After all the usual remedies had been tried and failed, in my despair I concluded to try Reiter's method. The treatment was begun at 9 a. m. on 13th. The patient was given calomel: twenty grains at 9 a. m., ten grains at 10, five grains each at 11, 12, 1, 2:30, 4:30, 6:30, 8:30, 10:30, 12:30, 2:30, and 5 a. m. of 14th, being *eighty-five grains* in twenty-four hours. No other remedial measure was made use of.

"During this time his condition was as follows: At 12 m. of the 13th he is sleeping quietly, breathing easily; the hard sound in inspiration and expiration is replaced by a soft gurgling or bubbling; the cough is loose; large, loose râles are heard in the larynx; the surface is warmer than normal, soft but not moist; the pulse is very fast and small. At 2 p. m. profuse vomiting; glairy mucus with yellowish flakes; there is one thin, loose, not fetid passage. At 2:30 no more dyspnoea; stridor entirely absent; voice clearer, stronger; cough not frequent, loose, barking. Vomited again at 2:45; water and flakes looking like membrane, bearing occasional clots of blood; a similar vomit at 4, and a thin, loose stool containing flakes of white mucus. At 6 is bright, playful, breathing noiselessly; eats some, which he has not done since yesterday; cough still hoarse, loose; voice clear, possessing some timbre, not much given to creaking. Went to sleep at 8 o'clock, sleeping quietly, breathing normally, without any rattling in larynx or any signs of dyspnoea; no fever; an abundant, dark passage, coming on rather hurriedly at 11. From this on he slept soundly and well till morning, his sleep broken only by occasional barking cough and by taking his medicine. At 7 a. m. of 14th, he had another dark passage; the voice is

clear; cough at times hoarse at times not, loose; respiration easy and noiseless; some feverishness, and pulse is rapid and small. Hydrargyrum bichlorid., one-sixteenth grain, is ordered every two hours; but the second dose causing vomiting in half an hour, the dose is reduced to one thirty-second of a grain. About noon began to complain of frequent attacks of belly-ache. Cough is only at times hoarse, respiration is easy, voice is clear; no appetite, no fever. By 4 p. m. has had two passages; the pain in the abdomen continues, is paroxysmal. In the evening the cough appears drier and is more frequent, and has the characteristics of bronchial cough; small dry râles are heard now for the first time in both lungs. At 10 p. m., hydrargyrum bichlorid., one one-hundredth grain, and ipecac, was begun—a dose every two hours. At night patient slept quietly and well, with scarcely any cough.

"At 7 a. m. of the 15th, somewhat hoarse; appetite better; bright and playful; looks pale and has lost considerable flesh; belly-ache is gone; bowels are normal; cough raw, dry, not hoarse, not severe; mercury and ipecac continued.

"On the 16th, the bronchial catarrh was in resolution; soft, mucous râles had taken the place of the dry sibilant; cough loose, not hoarse; the boy was bright and playful; appetite had fully returned; bowels moved normally. The medication was kept up till the 17th, when there was no further occasion for its continuance.

"Remarks.—The change from 9 to 12 o'clock of the first day was something wonderful. Several hours before vomiting occurred respiration had become easy, and the obstruction in the larynx softened. Patient was lying in a peaceful slumber, the anxious expression of the morning entirely effaced.

"As further proof of the melting away of the exudation, we find a few hours later the voice partly resuming its timbre. Quite a change from the weak, dead, flat sound of the morning. The vomited matter evidently contained portions of membrane. The act of vomiting was a sudden and powerful effort. There was not much gagging, and after the stomach was relieved, quiet was restored. The vomiting was evidently caused by the mercury. There were but six easy feculent passages in the forty-eight hours of the mercurial treatment. There was no straining, but considerable termina set in on the second day, which at once disappeared when the dose of the mercurial was diminished. The bronchitis following upon the croup was evidently equally benefited with the primary disease. The mental hebetude, feverishness, extremely rapid, soft, and small pulse, pale, bloated face, swollen neck, steady increase in the laryngeal symptoms notwithstanding the previous treatment, justify the diagnosis of true croup; and this opinion is confirmed by the flakes of membrane vomited and the course of the disease, corresponding, as it does, in all respects with that described by Dr. Reiter, the originator of this method of treatment."

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EXAMINATION OF FOOD AND DRINK.

In every community, and in large cities in every district, so-called "Institutions for the examination of food and drink" will be established after July 1st of this year all over the kingdom of Prussia. The preparations have so far advanced that every one of these institutions will be opened by that time and ready for work.

Each station consists of the district physician, of a veterinary surgeon, and of a chemist. They all have the necessary simple apparatus, of which experience has shown that they are needed for such examinations.

In every province, besides, there exists a central bureau, whose members are recognized authorities in their special branch of study, and where all the more expensive apparatus are kept, which are employed in the more elaborate examinations. Whenever cases come before the local stations needing the most thorough and searching examination, then such cases are transferred to the central bureau. If scientific questions of great importance arise in the central bureau, and a difference of opinion exists between the members constituting the bureau, the matter is referred to the Scientific Deputation in Berlin, as the highest tribunal, and there finally decided.

To guard the local stations against annoyance, nobody can have food or drink examined by them except he pays for it in accordance with a schedule of prices provided for by the Government. Only reports intended for the authorities must be made free of charge; for that purpose the members of the local station receive their salaries. If, for instance, a citizen thinks a certain article of food or drink to have been tampered with, or to be for some reason or other not wholesome or not as represented, the citizen complains to the police authorities or to the district attorney, to the court or to certain other officials. No matter to whom the complaint is at first made, the matter is at once turned over to the police authorities. They prepare a statement, containing the name and residence of the plaintiff, under oath, the name and residence of the person who sold the food or drink respectively, of the manufacturer,

and all the facts of the case. Refusal of anybody to forward, as by law directed, any such accusation of a citizen, or negligence on the side of the police or any other authority in obeying the directions of the law, is punished severely by imprisonment and fine. The police magistrate transmits the statement to the local station, and if they are there able, to decide the question—if they are not, the case passes through the central bureau or the Scientific Deputation, but returns to the local station—they return the statement, accompanied by their report, to the police authorities. Should the charge have been groundless, the matter rests there; but should the adulteration, diseased condition, or decomposition of the food or drink have been proven, the case is transmitted to the public prosecutor, who at once proceeds according to law against the guilty parties, and after judgment has been obtained, the papers are returned to the police authorities, who have to see that by publication in the most widely-read newspapers, and by placards put up in public places or otherwise, the judgment, with a description of the case, finds the utmost promulgation.

In case of epidemics, etc., the examination into their causes, etc., is also made by the local station—or in important cases by the central bureau, or even the Scientific Deputation in Berlin—and the Government is advised as regards the means to be employed for their extinction.

While, therefore, it is made easy to discover and punish adulteration of food and drink, dealers and manufacturers are also protected against wrong and groundless suspicions, as nobody ever discovers anything about the charge which a citizen has made, if the charge itself has not been proven.

A BENEFICIAL LAW.

The following law will go into execution in Germany, July 1 of this year. Wherever more than one thousand mechanics or laborers are living in one locality and are engaged in one trade, as in factories, on railroads, on buildings, or in any other occupation, those engaging and paying them for the labor performed must insist upon the for-

mation of beneficial societies for cases of sickness. The government had tables drawn up by experts, which prove from statistics what contributions for certain purposes are necessary, to guarantee the successful operation and the existence of such societies. If, for instance, one thousand men engaged on railroads—a perilous occupation—combine for the purpose of guaranteeing to each member, in case of sickness, a sum equivalent to his wages received when working, which sums are weekly to be paid for a period of thirteen weeks, and if the society besides binds itself to provide also medical attendance, the amount to be contributed for that purpose by each member amounts to about three cents per week. To these three cents the owner of the factory, or railroad, or the trade organization (necessarily existing, as the law demands it), adds for each member of the society one cent per week, and the same the community must do, in which the society resides.

In communities where such societies do not exist, because the number of persons employed does not reach the height demanded by the law, the community itself must guarantee every mechanic or laborer, no matter how employed, and not belonging to a society of that kind, free medical attendance for a period of thirteen weeks, and an amount weekly, equivalent to the wages received. The necessary money has to be collected from bosses, mechanics, and laborers actually employed, and if not sufficient, by taxation. When a community consists of less than one hundred inhabitants, several such communities must unite for the one purpose. Contracts are made with regular physicians, resident in the locality where their services are needed, and their compensation is fixed by law.

Certainly there is too much of paternal government and encroachment on individual rights in this law for us to hope ever to see it executed in our own country; still its beneficial consequences can scarcely be calculated. Any person earning his bread by manual labor, now has the guarantee in Prussia, that in case of sickness he is certain for a period of thirteen weeks of not only continuing to receive his wages, if his dis-

ease should last so long, but also of free medical attendance. Much misery will be thus relieved and done away with.

NOTES AND COMMENTS.

Paralysis of the Serratus Magnus Alone, without Participation of the Rhomboid Muscles.

An almost unique and very instructive case was recently observed by Ferrier. A heavy bag fell on the right shoulder of a laboring man, who had always enjoyed remarkably good health. Pains and disturbances of motion soon developed themselves in the right arm, and the symptoms were exactly those of paralysis of the serratus muscle. The main interest of the case centered in the fact, that the shoulder-blade assumed that position, which can be met with during rest only when the serratus magnus is paralyzed without the least participation of the rhomboid muscles; the shoulder-blade of the diseased side stood higher and more towards the middle of the back than the left, and the same was the case with the angulus scapulæ. The electric examination of the serratus and its motor nerve demonstrated complete reaction of degeneration, while the rhomboid, the lower part of the cucularis, the levator anguli scapulæ, the infrapinatus, the teretes and the scapular part of the deltoid, evinced for both currents an increased muscular excitability.

Stooping, round shoulders, irregular height of the shoulder-blades, greater prominence of one, etc., etc., all these abnormal positions may be corrected and removed, if the case is not one of too long standing, and if the causing element (as occupation, etc.) can be done away with, by methodical faradization of the muscle or muscles at fault. But we have too often noticed in such cases complete faradization of all the shoulder or back muscles. If we admit that faradization increases the power of a muscle—and this fact cannot be denied—we must see the importance of first discovering the muscle weakened in a given case, and then faradize this muscle alone. The same holds good with manipulation, and with Swedish gymnastics. The motions to be practiced by the latter have all to be made with the one view—of strengthening the weak muscle. It may be that we can thus explain why some manipulators meet with great success, and others with none at all. If, in the case above cited, the serratus alone is faradized, and gymnastics are practiced with only that muscle in view, a cure will be established

within a few weeks, and improvement be at once noticed; while, if the same is done with all the muscles of the shoulder-blade in a case, of that case a cure could take place only by accident, and after a treatment of many months.

Pressure on the Pons by an Aneurism.

In a case in which the post-mortem demonstrated the existence of an aneurisma of the arteria basilaris, compressing the right half of the pons, the clinical picture showed progressing paralysis of the four extremities, specially expressed on the left side. Several days before death the following symptoms were added: Comatose condition, twitchings of the left side of the body, and of the right orbicularis palpebrarum, and frontalis, nystagmus, causing abduction of the bulbi from the median line towards the right, and dyspnœa. But the most interesting phenomenon which Drs. Hallopeau and Giraudeau (*Union Med.*, 27, '84,) observed was the following: As soon as the head of the patient was bent forwards, respiration came to a stop in expiration, the symptom at once disappearing on bringing the head in the opposite position. H. and G. suppose that on bending the head forwards the pressure of the aneurisma on the pons was increased, while on turning the head backwards the tumor was lifted up from the pons and the pressure released. The stand-still of the respiration in expiration is attributed to irritation of the vagus-nodule, for the same phenomenon as in this patient is observed on irritation of the trunk of that nerve. The nystagmus and the deviation caused by it, as well as the twitchings in the right upper facial region, was probably induced by irritation of the origin of the right facialis-abducens.

Peptonuria as a Clinical Symptom.

From a very interesting article written as a thesis for obtaining his diploma by Dr. Fenomenow (Petersburg) and published in the *Deutsch. Med. Zeit.*, 37, '84, we abstract the following important facts:

1. Peptonuria is invariably met with during the final stages of croupous pneumonia, and stands in direct connection with the resorption of the croupous exudation.

2. The presence of pepton in the urine of persons suffering from diffused kidney disease probably depends upon peptonization of the urinary tubule-casts.

3. Peptonuria in phthisis pulmonalis does not

depend upon the extent of the morbid process, but upon the rapidity of its course.

4. In cases of typhoid fever, complicated by constipation, and in cases where the temperature ascends above 40° C. (105° F.), peptonuria is a common appearance.

5. Occasionally, peptonuria is also observed in scarlatina, exudative pleurisy, nephritis, puerperal fever, and in cases of organic disease of the heart, when compensatory hypertrophy ceases.

Diabenzolsulfonic acid is the finest test for peptones in the urine, causing, when peptones are present, at once an orange-yellow discoloration.

Naphtalin in Diarrhœa.

Especially in the diarrhœa of children, naphthalin seems to be an invaluable remedy. Prof. Rossbach, in Jena, has made a series of observations, and discovered that in all catarrhal conditions of the intestines, whether they coexisted with ulcerations or not, also in all inveterate, chronic intestinal affections, and in those of the small intestines as well as in those of the large bowels, provided they did not depend upon organic, incurable diseases, as cancer, etc., naphthalin was a specific, and invariably caused the disappearance of the malady. He never noticed any bad side or after-effect, and most of the naphthalin passed off again by the bowels, while a small percentage of it, changed to phenol, made its appearance in the urine. The usual dose for adults was from eight to ten grains daily. The remedy had also a very favorable influence upon all cases of vesical catarrh, the purulent discharge at once ceasing, and he attributes its beneficial effect in such cases to the changing of naphthalin to phenol in the urine—as phenol, especially in the nascent state, is a very powerful aseptic remedy, at once destroying all micro-organisms with which it comes into contact.

Patients generally do not object to the taste of naphthalin, if it is purified and obtained by sublimation; as a corrigens for its odor, a few drops of bergamot oil can best be recommended. (*Deutsch. Med. Zeit.*, p. 379, 1014.)

Micrococci Causing Loss of Hair.

Without any detectable cause, and without the accompaniment of any other symptom, a male individual was attacked by alopecia, which the patient himself attributed to infection, contracted in a hair-dressing saloon. In the region of the right temporal bone was observed a circular place, 5 to 6 ctm. in diameter, perfectly bald. In its

centre were noticed a few white hairs on the shiny skin, while the margin contained a zone covered by epidermis-scales. In this zone the hairs appeared broken and stunted in their growth. The least pull on a hair at once caused its falling out, the bulb always coming with it. By coloring, Dr. Sehlen, who reports this case in the *Centrbl. f. d. Mediz. Wissensch.*, 15, 1884, was enabled to prove the presence of small, round cocci, which were less than a millimetre in size, and found in large quantities surrounding the hair in the cells of the epidermis, and sprinkled between the sheaths of the roots of the hair. The author has instituted a series of cultures not yet concluded. A mild solution of corrosive sublimate ($\frac{1}{3000}$) destroyed the cocci and established the re-growth of the hair.

Are the Anterior Columns Excitable?

Van Deens first pronounced the view that the anterior columns of the spinal cord are not excitable. Fick proved by his experiments the contrary. But the majority of all investigators was in favor of Van Deens' view. Dr. Mendelssohn has recently tried to solve the disputed question in a different manner from his predecessors. In accordance with the physiology of the posterior columns, the fact is established that motion induced by their irritation is of a reflex character. If, therefore, on irritation of the anterior columns, the motion in the muscles of the extremities produced by it should take place more rapidly, the response to the irritation be quicker, than that ensuing on irritating the posterior columns, we would have the proof that the anterior columns are directly excitable. Mendelssohn's experiments on frogs have really established this important fact. When he irritated the anterior columns of a frog, the motion ensuing in the extremities made its appearance far more quickly than was the case when he irritated the posterior columns. (*Deutsch. Med. Zeit.*, p. 409, 1884.)

Alumen Ustum in Intermittent Fever.

Schidlovsky, a Russian physician of some repute, was the first to employ burnt alum as a remedy in intermittent fever. Lately, another Russian doctor, A. Sawwinsky, in charge of the hospital at Podolsk, near Moscow, has used it in twelve recent cases of the same disease, and with surprising effect. He administered eight grains of the drug twice daily. Even twenty-four grains were easily borne by the stomach, provided a large cupful of water was taken immediately after it.

Drs. Sattikow and Gawrilks, stationed in the Caucasus, reported some time ago that they had also employed this remedy, but utterly without success. Whether it acts only under special conditions, will yet have to be determined, and as Dr. Schidlovsky enjoys a well-merited reputation for veracity, it might be well, considering the present high price of quinine, to try the remedy on a more extended scale, so that we may learn the indications for its use.

SPECIAL REPORT.

OPHTHALMOLOGICAL MISCELLANIES.

BY CHARLES S. TURNBULL, M. D., PH. D.

(Concluded from page 757.)

W. Sykes contributes clinical notes and remarks on a *disease of the eyes peculiar to colliers*.

The sight first fails in bad light, and grows gradually worse, till the pupils are dilated and insensible to light, and only a perception of light remains, while nystagmus is well marked. Recovery takes place on exposure to light and air, without other treatment. The miners attribute the disease to the bad light given by the safety lamp, but Sykes believes it to be toxic, from gases accumulating in the pits.

Sorokin writes of *parasitic growths in the eye*.

The forms observed by Förster and Gräfe do not belong to leptothrix. In the cornea of an eye which had perished from panophthalmitis, he observed long, thin, opaque filaments; they are thicker than those of leptothrix-buccalis, show a tendency to twist themselves lengthwise around each other, or to assume a curved form. Attempts at cultivation failed, excepting in human blood; here the filaments lengthened, gathered themselves together in a curved form, showed transverse marks of segmentation, and divided into two to five pieces of different length; the process lasted from twenty-five minutes to one hour. The new pieces congregated, and thus formed additional bundles. This is a new form, leptothrix oculorum Sorokini. In an eye effected with panophthalmitis after iridectomy, and also in an existing catarrh of the lachrymal passages, he found filaments dividing dichotomically, having a thickness of two or three division-marks of the micrometer; they also exhibited transverse division, and thus formed widened rings. The twigs branch off only where there are transverse divisions. Besides these, there were folds of cells of various size and shape. All attempts at cultivation failed.

Leydig, of Bonn, speaks of *The Eye-like Organs of Fishes*.

Certain spots upon the ventral surface of some sea-fishes, which by Leuckart had been explained as secondary eyes, are not taken as organs of special sense by Leydig, who supposes that they are allied to the spendo-electrical or electrical organs of other fishes.

Wetschamton reports *An Anomalous Structure of the Human Eye*.

Absence of both irides. Both eyes turned in and up.

Wiethe. A case of *Congenital Deformity of the Pupilla*.

The papilla showed two dark elliptical depressions, likely colobomata.

Lagethschnikoff reports a rare case of *Elephantiasis Palpebrarum*.

Both lids are very much enlarged; the upper hangs down to the nasal angle. The disease began in early childhood. *Filaria sanguinis immitans*.

Gouvêa Hilario (de Rio Janeiro) reports a case of *Aniridia Congenita of Both Eyes, with Deficiency of Ciliary Bodies and Anterior Part of the Choroid*.

Man, 23 years old; complete absence of iris in both eyes; lenses dislocated upward, so that there was an aphakic space at the lower corneal margin. There was no sign of the presence of ciliary processes, nor of the anterior part of the choroid, while the posterior part was more or less normal, as were also the blood-vessels of the retina.

A knotty and most weighty question which is of the greatest interest to all medical men and parents is answered, and in our opinion well sustained by experience, in the conclusions of Berlin and Rembold, of Stuttgart, who say: "The present slanting system of penmanship should be retained, and the school-boards and teachers should understand the necessity and importance of these directions, so as to enforce them with the proper intelligence and energy." The best means to accomplish this seems to be the embodiment of a short abstract of B. and R.'s report.

1. The inclination of the letters. *i. e.*, the angle which the downward stroke makes with a line perpendicular to the ruling of the paper, should be 35° to 40°.

2. The book should not be placed to the right, but as nearly as possible before the median line of the body, and so inclined that the direction of the writing rises from the left and below to the right and upward at an angle of 30° to 40°.

3. The position of the body as follows: (a) The upper part of the body remains upright as far as

possible, so that it is supported by the spinal column, which is prevented from becoming tired by resting its lower portion against a support. (b) The transverse axis of the body, the connecting line between the shoulders, is parallel to the longer edge of the table. (c) The body must not be pressed against the edges of the table, but kept at a distance of about 3 cm. from it. (d) The head, whose transverse axis is also parallel to the longer edge of the table, is lowered but slightly toward the latter. (e) The elbows must be kept a little lower than the edge of the table, and at an equal distance from the body. (f) The forearms, not the elbows, are laid upon the table in an almost symmetrical position, the book being placed in the median line of the body.

4. This position of the body is to be maintained during the whole act of writing, the upper part of the body and the upper arms to the point of support of the forearms upon the table's edge remaining quiet, and the hand and forearm alone performing the act of writing. (a) The movements necessary to produce the letters and single words must be performed by the joints of the fingers and the wrist. (b) The right forearm must not move its point of support upon the table's edge outward, as the writing advances along the line, but must revolve about it as a centre, thus describing an arc upon the table. In order to facilitate adherence to the particular directions (only given here in brief), it is advisable, especially in smaller children, to shorten the lines. (c) When a new line is begun, the forearm must describe the same arc backward with greater rapidity. As more lines are written, the wrist and finger-joints must be more and more bent.

5. The head also must not change its position; the slight rotation from left to right in writing is not injurious.

*In view of the deleterious consequences of a too close approach of the eyes in writing, and the fact that in the youngest children this is the case to a very high degree, producing most unfortunate results, which for anatomical reasons cannot be obviated by changing the regulations, the following suggestions are made:**

1. Reading and writing, playing with small objects, in general work requiring close vision, should be forbidden in the schools for younger children, the kindergartens, etc., whence the children frequently enter school with eyes already myopic.

2. Instruction in writing should be limited as much as possible the first year; reading of distant objects (blackboards) should be first taught, then the books, and finally writing, the time not ex-

tending beyond half an hour the first years, and limited to five to ten minutes, followed by a pause of a few minutes.

3. The letters should be large, symmetry and beauty being of less importance.

4. The slanting lines of the blackboards and books should be omitted.

5. Writing, especially at home, should be limited as much as possible, and permitted only when the child's home is sufficiently light and airy.

6. The teachers should impress the children with the importance of assuming the correct attitude when writing at home. Instructions to parents would also be desirable.

According to Karwat Würzburg, the nutrition of the crystalline lens is impaired in atheroma of the carotid, a circumstance which materially favors the development of cataract. Embolism of the central retinal artery may also result.

Holstein, of Berlin, criticises the various reports on antiseptics in ophthalmology, and comes to the following conclusions:

1. The great danger of septicæmia, which threatens the body after severe surgical operations, need not be feared in ophthalmology, as the intra-ocular pressure and firm fibrous envelopes of the globe make septicæmic infection of the body very difficult. Therefore, antiseptic treatment is unnecessary.

2. The serpent ulcer, dacryo-cysto-blennorrhœa, and the specifically infectious conjunctival blennorrhœas, should be treated with antiseptics on account of their septic nature.

3. The strict antiseptic bandage, according to Lister, cannot be applied to the eye as it is not practical, as it irritates.

Boracic acid has thus far proven the best antiseptic. It does not irritate, but will disinfect.

Chisholm, of Baltimore, and L. Turnbull, of Philadelphia, recommend bromide of ethyl as the most perfect anæsthetic for short, painful surgical operations. Narcosis can be produced in a minute, and lasts two or three.

According to Mauthner, the electric light increases vision and color-perception. The arc-light is not steady, and therefore injurious; the incandescent is steady, and theoretically no objection can be made to it, but experience alone can decide as to its value.

Sakewitsch found a few cases of extraordinary acuteness of vision among the soldiers of the 14th regiment of Russian dragoons, two cases with $V = \frac{8}{20}$, three with $V = \frac{7}{20}$, and seventeen with $V = \frac{6}{20}$.

*Italics our own.—C. S. T.

According to Mari, *forty centigrammes of santolin are sufficient to produce an effect lasting twelve hours*. Bright surfaces appear a greenish yellow; dark ones, especially shadows, violet; red assumes a purple tinge; yellow seems pale; blue has a greenish tinge; violet and purple become darker; orange seems pink; greenish-yellow is changed to grey. The spectrum is shortened, especially at the violet end. In a violet-blind person the whole spectrum was displaced.

Dobrowolsky calls attention to the fact that most of the scholars of the Ural high school are children of *inhabitants of the prairies*, to which must be ascribed their *acuteness of vision* and the *rarity of myopia*, and not to the favorable hygienic condition of the schools.

Königshöfer says the *direction of the writing is entirely immaterial*, as far as the laws governing the movements of the eye are concerned. The sole cause of the various bad attitudes of the body is the attempt to find the most comfortable position of the wrist and fingers.

Makrocki saw several little *nodules in the upper lid* of both eyes of a lady. After incising the skin over them, several well formed lashes were extracted.

Berger describes two (extremely interesting and instructive) cases of *paralysis of the acoustic and fifth nerves, with paralysis of the facial nerve, due to the caries of the petrous portions of the temporal bone*. In one of the patients the cornea of the affected side had remained intact, though without sensibility; in the other, there was neuro-paralytic keratitis.

Hasner observed a *paralysis of the left oculo-motor nerve* in a girl seventeen years of age, which always occurred, for the four last years, *as soon as menstruation begun*, and lasted for three days. Hyperemia, due to menstruation, at the origin of the left oculo-motor nerve, was probably the cause, producing transient paralysis by pressure.

Thompson observed *painful blepharospasm*, and spasm of the ciliary muscle, *after exposure to the electric arc-light*.

De le Peña found an *echinococcus behind a highly diseased and blind eye*, which he had enucleated. Once before he had noticed a similar case. According to him, echinococcus passes through three stages of development, presenting the following symptoms:

1. Slight exophthalmus, with V. normal and tension normal, slight and transient pains.
2. Increased exophthalmus and decrease of vision and high tension.
3. Marked exophthalmus, dislocation of globe

outward—complete loss of vision, suppuration of the cornea.

P. Barabaschew reports another interesting case. Patient twenty-seven years of age, formerly a soldier. Marked *echinococcus exophthalmus* of right eye, chemosis painful, necrosis of cornea, V = 0, choked disc, the orbit filled with a smooth, tense tumor, distinctly fluctuating and dislocating the globe downward and outward. "In 1877, while he was a soldier, a shell exploded near him, and he became unconscious. After half an hour he recovered, when he noticed that vision in right eye was greatly impaired. Two months later the eye gradually began to swell. Diag. by exclusion; echinococcus of the orbit. When punctured f. 3 viiss. of colorless liquid was discharged (tracts of albumen, much Na. Cl.). After the puncture, severe reaction, oedema extending to the temple, lasting several days. Operated by making an incision at the upper inner edge of the orbit, preserving the globe. Fifteen larger and smaller echinococci were removed, varying in size to that of a pigeon's egg, and finally the original cyst. After the operation, severe reaction and slow recovery (as also in another case described some time ago by the same author).

Parigot, of Lyons, (Ferrier and others) recommends *inoculation against pannus*, and bases his claims on five cases which he cites. The pus should, however, be taken at the chronic stage of of blennorrhoea, as the affection produced is the less severe.

Wecker, of Paris, has made a series of experiments with the *infusion of jequirity* recommended by him for producing purulent ophthalmia to cure trachoma, and has arrived at the following results: Undoubtedly the infusion produces a purulent inflammation of a croupous character, the intensity of which can be regulated by the number of applications. The granulations rapidly disappear, and even if it should be necessary to produce this inflammation several times, the treatment is less disagreeable and dangerous than inoculation. The cornea is not endangered. W. says it is especially indicated in the torpid forms of granular conjunctivitis (trachoma). Wecker and Moura, of Brazil, claim priority in the use of jequirity.

Deuffe, Paris, reported at the Acad. of Med. de Belgique, March 31, 1883, on his *experiments on jequirity*, and to the conclusion, "the inflammation produced by it fails to accomplish any therapeutical results."

Gruening, New York, reports two cases in which he used *jequirity with excellent results*. One was a girl of 19, the other a man of 83.

Mazza applied *jequirity* in thirty cases of *trachoma*. Excellent results were obtained in five severe cases in which the disease had lasted four years, and there was extensive pannus; the cornea became perfectly clear. In five other cases improvement was not so marked, while in fifteen others no changes whatever took place; in the remaining five cases the result was absolutely negative. He never saw it make a case worse.

Paggi succeeded with *jequirity* in one case of *trachoma*, but failed in a second.

Ponti also applied *jequirity* in four severe cases of *trachoma* and *pannus*. Results were excellent, especially as to the clearing of the cornea. Besides the usual symptoms, he observed in two cases considerable *salivation*, and in one *profuse perspiration* and *nausea* at the height of the inflammation.

Simi obtained an excellent result with *jequirity* in a case of *mixed trachoma*. The disease had lasted two years, and had not yielded to various methods of treatment.

Tuberculosis of the conjunctiva has been seen in seventeen cases, so also *condylomata*.

CORRESPONDENCE.

A Reply to G. W. S., M. D.

EDS. MED. AND SURG. REPORTER:

Under the head of "Treatment Wanted" in May 31st No., page 701, by Dr. G. W. S., I have to say that I have found several cases very similar, occurring mostly in women, and have attributed them to irregular nerve or muscular action of the small intestine, the jejunum, from which a constipated condition of that portion prevents the passing downward of the bile, and after a time it is poured back into the stomach, where it is the source of great irritation. The remote neuralgic pains doubtless depend on the central irritation, while the pain at the pit of the stomach arises from muscular spasms of the stomach itself from the presence of the alkaline bile neutralizing the normally acid fluids of that organ. Of course the bile could never get back into the stomach except by being prevented from going downward, or by a reverse peristalsis of the jejunum or duodenum. When in the stomach it is a foreign body of opposite chemical action from the gastric fluid, and at once checks further transformation of food by the stomach. Not only so, but the nerves of the stomach are injured so that digestion is not soon started up again. Hence the importance of fasting after an attack of bilious vomiting, and the administration of an acid, particularly the muriatic, and pepsin, when food is given.

Thirty years ago I was in the way of giving such cases emetico-cathartics, so as not only to dislodge the bile, but to open the bowels and cause this downward action. This was a very effectual way to get rid of the trouble, but it was severe and

distressing, and required the detention of the physician till the first effects of the medicine at least were over. In recent years I quiet the pain at the pit of the stomach by hypodermic doses of morphia combined with atropia. The morphia so combined is much less sickening than when given alone. Having given the morphia, I give sulphuric acid to neutralize the alkaline bile and render the contents of the stomach acid again. The difficult part is now to be undertaken, that is to get the bowels open and acting downward once more. A large dose of calomel will do it after a time, but I do not like it. A saline, as the Rochelle salts, the citrate of magnesia, etc., will also do it. The best thing, however, is the sulphate of magnesia, with sulphuric acid enough to acidulate it, or the addition to the magnesia of the juice of a lemon. Plain water, or an acidulated water may be given, but no foods for some time, as they will irritate and delay recovery.

Having restored the gastric functions, the next thing is to keep the bowels henceforth free by the use of a mild aperient, as the cascara cordial in small quantities two or three times a day, or the infusion or extract of senna in combination with aromatics and calomel. Whatever laxative is used, it should be one which acts specially upon the upper part of the alimentary track, and not like thousand and one pills which glut the market, whose chief constituent is aloes. The treatment should be continued and supplemented with bitter infusions containing iron, through the intervention of sulphate of magnesia. To these nuxvomica or strychnine may be added. Rye pudding with cream for breakfast will save considerable other physic. Plain foods, with exclusion of pastries, sweetmeats, doughnuts, etc. All sorts of assasant fruits, particularly currants, with greens, vegetables, plain bread, etc., will do much towards a permanent cure of such cases.

For my theory of the torpidity of the small intestines, I have not the guidance of many authorities, yet the facts of such cases can more easily be accounted for on such a supposition than on any other. I have seen patients whose bowels in their lower part seemed to perform their functions fairly well, yet who were troubled with central torpidity. I think we have too often concluded that if the bowels acted fairly well in their lower part all was right above, and we have not taken into account that the liver and pancreas empty their contents into the canal some twenty feet from the outlet, and that therefore there may be chance for much functional disturbance of the upper part, with little show for it below, only a somewhat sluggish movement of the colon. Will not some others who have thought in this direction give their views of these cases of regurgitant bile? Truly, E. CHENERY, M. D.

Professor of Principles and Practice in the College of Physicians and Surgeons of Boston.

—M. Duprez, a veterinary meat-inspector, of Paris, fed some rats on trichinous meat for thirty-one days; they remained in perfect health. A piece of muscle was removed from the thigh of each animal, and was observed to be free from both young and encysted trichinae.

NEWS AND MISCELLANY.

The Kentucky State Medical Society.

HELD AT BOWLING GREEN, JUNE 3, 4 AND 5, 1884.

Reported by Alien Kelch, M. D.

The twenty-ninth annual meeting of the Kentucky State Medical Society was called to order at Bowling Green, by Dr. J. N. McCormack, president, at 2 o'clock, p. m., Tuesday, June 3.

After prayer by the Rev. J. L. Caldwell, Dr. T. J. Townsend, of Bowling Green, chairman of the Committee of Arrangements, was called upon, and spoke as follows:

"Mr. President, and gentlemen of the Kentucky State Medical Society: In behalf of the physicians of Warren county, it is my pleasant duty on this occasion to welcome you to Bowling Green. You could not have selected a place better suited for meeting than this beautiful little city. Adorned by every appliance that art with nature can contribute, it offers special inducements for business and social pleasure; and we would have you understand that our earnest desires are satisfied *only* when known that the object of your visit here is fully realized. You are with us at a time when your distinguished presence is most appreciated, and we know your coming is a happy day to the medical profession of Warren county. You are here to dispense harmony and affiliation, to encourage and perpetuate the fostered principles of progressive medicine, to read and discuss recorded observations that illumine and expand the great domain of medical science, and now we gladly welcome you to Bowling Green. To give expressions of welcome, this city will not be an exception to the time-honored customs of conviviality. Receptions and excursions have been arranged for your enjoyment, and in their order will appear in the printed programme. To-night, an address, "Cause of Consumption," Dr. J. W. Holland, Louisville, Ky. Wednesday evening, from 9 to 11 p. m., receptions by Mr. and Mrs. D. M. Lawson, Mr. and Mrs. P. J. Potter, Dr. and Mrs. J. N. McCormack, Residence street. Thursday at 1 p. m., car will leave depot for boat excursion through locks and dams on Barren river; will return at 9 p. m. Friday morning, excursion to Mammoth Cave."

Following this report of the Committee of Arrangements, the Hon. C. W. McElroy, in behalf of the physicians and residents of the city, delivered an eloquent and cordial address of welcome, which was responded to in behalf of the visiting delegates by Dr. Dudley S. Reynolds, of Louisville.

The regular proceedings of the convention were begun by the report of the Committee on Medical Ethics by Andrew Seargent, M. D.

Dr. J. P. Thomas, of Pembroke, to whom had been assigned the subject of *Materia Medica*, reported that he had given a fair test to the hypnotic paraldehyde, suggested as a substitute for chloral and opium, and his investigations had led him to regard it as a very mild hypnotic, adapted only for those cases of insomnia due to excitation of the nervous system. Kairine, as an antiperiodic and febrifuge, unless used in dangerous doses, he found not equal to salicylic acid nor quinine.

He remarked that he had unexpectedly produced almost fatal paralysis of the heart by its use in one case, with ten grains. Hyoscyamine in one case of insanity of the form of acute mania seemed rather to increase than allay the excitement.

DISCUSSION.

Dr. J. M. Matthews, of Louisville, said: "I take it the report of this committee is among the most important, and just one remark I was struck with and would like to have illustrated. He speaks of substitutes for chloral. I have used chloral for years, and from my own experience I must confess I am out with it. Its treacherous nature renders it a very uncertain and sometimes very dangerous drug."

Dr. J. W. Holland, of Louisville, said: "I had hoped to hear included the word opium in connection with chloral, in reference to their mutual action upon that form of insanity known as melancholia. Sydenham, however, called attention more than a century ago to the cordial qualities of opium. If there be already a melancholia, it proves more profound when chloral is employed than when opium is used, and the tendency to suicide is increased. I fear hyoscyamine is responsible for much the same effect."

Dr. Stone, of the Western Lunatic Asylum at Hopkinsville, said: "Hyoscyamine we have used not very extensively, but almost altogether hypodermically and in large doses, frequently attaining by this method as high as one-twelfth or one-tenth of a grain. In smaller doses we have kept it up for ten or twelve weeks, but we have found no material advantage from it over other drugs used to accomplish the same purpose. It will procure sleep, and that very promptly, in acute mania, and sometimes better than chloral. I agree with Dr. Holland as to the superiority of opium over chloral in melancholia. I have in mind one case, that of a lady who was kept on the chloral treatment for two years without improvement, and who, under a six-weeks' morphine treatment, recovered and was discharged. When chloral is used, we generally combine with it bromide of potash."

Dr. Pinckney Thompson, of Henderson, said: "I can not conceive that any man would expect chloral to cure anything other than that which it cures by the relief of a spasm of pain, such as a gastric neuralgia, where a full dose will often relieve at once, in this and such other affections as do not tend to recur immediately upon the cessation of the effect of the medicine. As to the danger from its use, the same may be said of all hypnotics when the dose is too large; they are all poison when used in poisonous doses."

Dr. W. M. Fuqua, of Hopkinsville, said: "I have used chloral from the very earliest introduction of it, but never to the extent I have for the last two or three years; as a remedy I think it has its place, and subserves a good purpose. It is for the discreet practitioner to find out that place, and govern his use of it by that dissemination. I think there can be no question that it produces, when long-continued, anemia of the brain; that it exercises a powerful effect on the cardiac centres, and that it is accumulative. The fact has not been referred to that it is anæsthetic as well as hypnotic."

Dr. R. M. Ferguson, of Louisville, read a paper on "Nature of Glaucoma." In substance he spoke as follows: "The special feature of glaucoma is the increased hardness of the eyeball. There are four ways of accounting for this, (a) hardening of the enveloping membrane from such change as calcification or ossification; (b) active contraction of the sclera; (c) increased secretion into the eye; (d) diminished secretion from the eye. He dismissed the first two methods of accounting for the hardness, because no facts support either of them in glaucoma. With reference to the third, but little is known, yet it is exceedingly probable that in many cases it is the initial step in the beginning of the disease. The continuance of the tension produces varied secondary changes. The constant teasing of the muscle in ciliary neuralgia might, it appears, bring about an over-abundant secretion of intra-ocular fluid. The fourth supposition offers more conclusive arguments to sustain it than either or all the others. In this direction recent investigations have yielded gratifying results."

Dr. Ferguson traced the natural direction of nutritive fluids from the ciliary processes to its escape from the eye, by means of the spaces known as "Fontana's spaces," about the canal of Sclemm, into which they open. Now, interference with this course results in non-elimination of intra-ocular fluid. It is certain that upon this hypothesis many cases of glaucoma can be explained, and that it offers the best explanation of that form of glaucoma least understood, viz., the simple variety. Many affections may cause a narrowing of the lymph-channels, each varying to a certain extent the picture of the disease, all however tending to the same result.

The speaker explained how enlargement of either ciliary body or crystalline lens approximates them, and thus narrows the circumlenticular space. Brailly's investigations having shown the lens to be contracted in the senile eye would not preclude the possibility of its having at a previous stage been enlarged.

Various congestions of the head would produce the same result by distension of the vessels. In irido-cyclitis, where the periphery of the iris is retracted, and in cases of iritis, where the pupillary margin is completely adherent to the lens capsule, and in other conditions arising from these, we have conditions favorable to the development of glaucoma.

This line of reasoning was continued until a very fine theory of the nature of glaucoma was evolved.

In the discussion of the paper which followed, Dr. A. W. Johnston, of Danville, inquired for a reason for the fact that seventy per cent. of cases of glaucoma occur among the Jewish.

Dr. Dudley S. Reynolds did not recognize such a statement to be a fact. He had observed the disease to be most frequent among those persons most liable to strain the power of accommodation, as among sewing-women, students, and watch-makers.

Dr. J. W. Holland, of Louisville, seeing the discussion about to drop, said that inasmuch as no one had been able to give an explanation of so singular a fact, he could only account for it on two grounds, and that was certain personal peculiar-

ities, and the fact that they did not eat pork. (Laughter.)

Dr. Wm. Bailey asked if it was not a fact that Jewish women sometimes had glaucoma. If they did, he would not accept the personal peculiarities of Dr. Holland's theory.

Dr. A. M. Vance, of Louisville, called the attention of the association to a new process for producing local anæsthesia for the minor operations in surgery. It consisted simply in the modified application of the spray of ether. Dr. Vance states that anæsthesia occurs long before the parts are frozen, and he begins his operations in a few seconds only after the spray begins upon the part, and has it played upon the parts just preceding the knife as the operation is continued. In this way an eye, he said, had been enucleated without general anæsthesia, a tracheotomy had likewise been successfully performed, and he had cut the whole plantar fascia in a child without a flinch beyond what was first made when the cold ether struck the part. He reported it to be his uniform custom to resort to it alone in all tenotomies.

Dr. Pinckney Thompson said: "I can conceive that if this could be done, it will remove one of the great dangers of tracheotomy. If it can be made to reach not only the skin but the deeper structures, it would add, in my judgment, many successes to that otherwise generally fruitless operation. As for myself, I have only practiced it in one instance of hæmorrhoids and in that it was certainly preferable to any general anæsthesia with which I have had experience."

Dr. J. M. Matthews said: "I have been exceedingly anxious to learn of some way in which to tie a man's piles without having to resort to general anæsthesia: I therefore tried this plan in several instances, but my experience with it has not been so glowing as Dr. Vance's has. In the limited number upon whom I have tried it, the pain following the operation has been excruciating."

Dr. Holland said: "We must not forget that he (Dr. Vance) proposes an entirely different process from that of freezing the tissues. Two reports, each very positive, and directly opposite in character, are here made to us, and I am therefore inclined to suppose that the results in the two cases depend upon the manner in which this anæsthesia is produced. In the meantime, I wish to impress upon the minds of the profession the necessity for care in the use of ether, on account of its inflammability. Tracheotomy is an emergency operation, generally performed at night and by artificial light, and it requires great care in handling this substance on account of its great danger."

Dr. T. H. Stucky, of Louisville, read a paper on "Catarrhal Headache."

WEDNESDAY FORENOON.

Dr. L. L. McMurtry, of Danville, read a paper on "Improvements in Surgery."

The first portion of the report was devoted to the consideration of the subject of anæsthetics. Recent investigations as to the comparative merits of sulphuric ethyl, ether, chloroform, bromide of ethyl, and anæsthetic mixtures of these agents, were reviewed in detail. The experimental inves-

tigations of Dr. B. A. Watson, of Jersey City, were carefully considered. His conclusions were, that sulphuric ether is decidedly the safest anæsthetic which has yet been employed in surgical practice, the mortality being relatively small when compared with that of chloroform, bromide of ethyl, and the mixtures employed. These results of experimental study are confirmed by clinical experience. Dr. McMurtry doubts if any agent will ever be found which can carry patients so near the border lines of life in safety. He doubts if anything is accomplished in avoiding danger, by the indiscriminate exhibition of alcohol before giving an anæsthetic. He then discussed the method introduced by Molliere, of administering the vapor of ether per rectum—the recent publications of Dr. William F. Bull, James B. Hunter, and Robert F. Weir, upon this mode of anæsthesia. The brief experience already recorded he claimed demonstrates the danger of the method, as exemplified by intestinal hemorrhage and diarrhœa; but the advantages of a method which suppresses the period of excitement, permits accurate regulation, avoids bronchial irritation, and aids materially in operations about the face, are apparent, and the method deserves to be tested thoroughly. In concluding this portion of the report, the speaker commended the ether inhaler of Dr. Allis, of Philadelphia.

The greater portion of Dr. McMurtry's paper was devoted to recent improvements in abdominal surgery. He discussed at length the treatment of wounds of the intestines, and declared the indications of treatment in contused, lacerated, punctured, and gunshot wounds of the intestines, preventive of fecal effusion and peritonitis. To secure the first, the wound of the tube must be securely sutured, however small it be. To do this, and cleanse thoroughly the peritoneum, the abdomen should be opened by abdominal section. The speaker in this connection called attention to the very confident views expressed by the late Dr. Marion Sims in 1882, which he thus quoted: "I have the deepest conviction that there is no more danger of a man's dying of a gunshot or other wound of the peritoneal cavity, properly treated, than there is of a woman's dying of ovariectomy properly performed," and remarked that in the able paper of Dr. Parks, recently given to the profession, on this subject, this statement of Dr. Sims was deemed prophetic.

Dealing with another branch of abdominal surgery, Dr. McMurtry alluded to the difficulties and uncertainties which surround the diagnosis of abdominal tumors. These difficulties were so great that in a large number of cases the diagnosis can only be positive when the abdomen is opened. He detailed illustrative cases from his own experience. In one case, that of a young lady with a fluid accumulation in the abdomen, the patient had been in the hands of several skillful surgeons, with a different diagnosis by each. After aspiration and the removal of two gallons of fluid, complete recovery ensued, thus showing the tumor to be a cyst of the parovarium.

After discussing at length the differential diagnosis of abdominal tumors, the speaker concluded with the statement that "while the results already achieved in the brilliant domain of abdominal surgery surpass the expectations of the most

speculative enthusiast of half a century ago, there remains a vast and rich outlying province as yet untrod by the restless foot of genius."

"There is one feature of the report," said Dr. A. W. Johnston, "to which I would call your attention, and that is the absence of any reference to the importance of drainage in the treatment of wounds of the abdominal cavity. It is one of the most important features of the after-treatment of these wounds. Lawson Tait speaks of drainage by the alimentary canal; he says he has made it a practice to purge these patients, and that he secures excellent results from the practice. We all know that when a purgative is given and succeeds in bringing an operation, water must come from somewhere, and this method I have found to act well in two cases recently under my charge. One of them exhibited marked improvement from the action of the purgative. His abdomen was distended, and he vomited frequently, but after the large dejections secured by calomel and podophyllin he recovered rapidly. After ovariectomy I think the large drainage-tubes now in use very much to be preferred over the small ones selected formerly. In one case upon which I operated, when the tumor was removed the attachments were found to extend all throughout the abdomen, and the large bleeding surface rendered the application of the persulphate of iron in some places a necessity. The large drainage-tube afterwards used permitted the clots formed by it to pass with ease."

Dr. D. W. Yandell, of Louisville, was understood to say: "With reference to the future of gunshot wounds of the peritoneum, as expressed by Dr. Marion Sims in the quotation read, the question was discussed a good deal between Dr. Sims and myself, and he took the extreme ground to which I objected then as now, as not expressing the real condition of our knowledge or resources. He says, 'I have the deepest conviction that there is no more danger of a man's dying of a gunshot or other wound of the peritoneal cavity, properly treated, than there is of a woman's dying of an ovariectomy properly performed.' That is to say that 97 per cent of wounds of the abdominal cavity ought to recover. There can be nothing certainly more misleading, both to the people who are, after all, our auditors, and to the profession, than that statement. What I wish to say is this: that you take the experience of the individual members of this society, and it will result that out of six cases of gunshot wounds of the abdomen, four will die—one of peritonitis, two of hemorrhage, and one of septicæmia. Two will die of hemorrhage, then, and two of something else. Now, in performing ovariectomy, you are prepared for hemorrhage, and you know when and where it will probably occur, and you are therefore prepared to meet it. Again, the shock is deeper from a shot-wound than from that made by the surgeon's knife, and the wounded person is seen for the first time in that condition. Further, no man has yet been so wise as to be able to say what course a ball has taken after it has once entered the body; and while I believe it is good surgery to open the cavity, as taught by the master of us all, yet there are many cases where it is not good surgery: that is to say, here is a man who has had a ball from a Derringer pistol pass

through him; you find him pulseless and cold—desperate. Under such circumstances I do not believe it is good practice to open the wound for anything. With cutting wounds it is quite otherwise; the shock is not so great. All about the wound the tissues are puffy, and it is evident hemorrhage is taking place. Under those circumstances the indication to open the wound and find the bleeding vessel is plain. All I wished to say was this—that the declaration of a great man, published in a moment of enthusiasm, is misleading; that the statement is not sustained by facts, nor likely to be sustained; and that shot-wounds are incalculably more dangerous than the knife of the surgeon in operations. I would therefore say, as a matter of consolation to gentlemen who meet with shot-wounds, that they need not recriminate themselves if the patient should happen to die, for they will sometimes, and that not infrequently, die from no want of proper attention.”

Dr. J. A. Larrabee said: “Of course I do not propose to discuss the surgical bearing of this paper. I noticed the remarks on anæsthetics, and it is of them I wish to speak. I object to the deductions on the use of chloroform. If a death occurs from its administration occasionally, it must not be forgotten that it is used in a very great number of cases. In the first place, this is, as I understand, intended to be pushed only to that extent sufficient to overcome the objections of the patient, after which profound anæsthesia is to be accomplished in the usual manner. That has been done in a limited number of cases, yet among that limited number one death occurred. It should not be overlooked that different means are to be employed for resuscitation according to the anæsthetic employed. When danger is threatened from ether, pulling out the tongue and stimulating the muscles of respiration are eminently proper; but with chloroform it is different, for the heart here fails first, and it is the organ to which attention must be directed.”

Dr. Stone, of the Western Lunatic Asylum, at Hopkinsville, spoke of the importance of resorting to every means at the command of the surgeon to avoid mistakes in diagnosis; and in connection with his remarks related the following: “Mrs. H—, æt. 35 years; German; very ignorant; was transferred to a metropolitan hospital from a county almshouse for treatment for abdominal dropsy. The history of the case, as given by the almshouse physician (the woman herself could give none), was that the woman was admitted five weeks before on account of abdominal dropsy, and five gallons of fluid withdrawn. She has three children, and has had two abortions. Abdominal trouble began six months ago. She was suddenly seized with pains in the back and side, which continued for a week, when enlargement of the abdomen became perceptible. Subsequently, vomiting continued for two months, enlargement still increasing. Ten days ago she was transferred to the hospital, her recovery from the tapping being sufficient to permit it. With history before him, an accomplished physician, after a cursory examination, pronounced it a case of simple ascites. Two experienced physicians were called in consultation, and discovered a tumor rising to an inch and a half from the umbilicus,

inclining to the left side. It was agreed to be a case of left ovarian dropsy. A week later, she was turned over to a distinguished surgeon for operation. He examined the case thoroughly and concurred in the diagnosis. The next day an eminent physician of large practice was called to see her. He made a thorough examination with the sound and otherwise, and concurred in the diagnosis and the advisability of early operation. Shortly after this examination, a slight bearing-down pain expelled a large clot of blood. A small opiate, however, soon removed all suspicious symptoms, and it was decided to operate on the fifth day succeeding this. The day following, the professor delivered a clinical lecture to a large class of medical students upon ovarian disease, its differential diagnosis, and the announcement was made of the operation upon the patient then before the class. An able obstetrician, a professor, and another of national reputation, finally called in late in the afternoon of the day immediately preceding that set for the operation. This careful specialist listened to the history of the case and all previous examinations, and proceeded to examine the tumor, first externally by palpation, percussion, etc., recognizing co-existing ascites. The sound passed $5\frac{1}{2}$ inches into the cavity of the uterus. I am credibly informed that this examiner diagnosed two tumors, one the enlarged and subinvolved uterus, the other of doubtful character. The sound when withdrawn, in this as in the other instances, was covered with blood, and pains came on soon afterwards. They now, however, assumed a more violent character, for which ten grains of Dover's powder was given. In fifteen minutes she passed from her vagina three pints of blood and water. The patient gave birth at 8 p. m. to a six and a half months' child, which lived until morning and died. The candid professor lectured that day upon ovarian tumors, and the various methods of discussing them, with the tumor before him. In this case there were several features to mislead even the most wary; but the recital of such things will, it is hoped, impress the importance of the very greatest care in such questions, where so much is involved.”

Dr. D. W. Yandell, of Louisville, was understood to say, “This is simply a report of one of our failures. If the faithful remained until all the faithful told their experiences, this society would last until Christmas. I know of two or three such cases as has been detailed. Professor Miller and Prof. Bayless diagnosed an abdominal tumor to be ovarian, and not until the woman gave birth to a child did they discover their mistake. Some years afterwards, a woman came from Mobile; she had a tumor; she was a widow: Parvin saw it; Miller saw it; Thomas saw it, and all declared it to be a fibroid. In the fall she gave birth to a child. There is a gentleman present through whose kindness I saw a woman four years ago. She had an enormous tumor, pronounced by myself, by Parvin, by Sam Gross, and *other eminent men*, to be an enormous fibroid. Time went on, she was given some muriate of ammonia and ergotine, and about a year ago she was seized one night with all the symptoms of peritonitis, collapse, and shock, and the gentleman called to her tapped her, and drew off a large quantity of fluid. I saw her, operated upon her, and while

the operation was all that could be desired, the woman died. That woman was seen by enough eminent men. These things show simply that the wisest and most experienced men make mistakes.

(To be Continued.)

Medical Society of New Jersey.

One hundred and eighteenth annual meeting, held in Cape May, Tuesday and Wednesday, January 10 and 11, 1884.

Tuesday.—The meeting was called to order in the Stockton House, at 4:30 o'clock p. m., by the President, Dr. S. Wickes, of Orange. Vice-Presidents Baker, Parrish, and Kipp were present. There was a large attendance of delegates and invited guests. After prayer by the Rev. G. F. Bishop, of Cape May, Dr. H. G. Taylor, Chairman of the Committee of Arrangements, made an address outlining the business and entertainments of the session.

Dr. Muray then delivered the

ADDRESS OF WELCOME.

"Mr. President, and Gentlemen of the Medical Society of New Jersey: It has fallen to my lot to extend to you a welcome, which I most heartily do, on this your second visit to our city. Since your last visit, in 1876, we have been visited by a destructive conflagration, sweeping out of existence all of our largest hotels, except this one in which you are now assembled. But Cape May, like the Phoenix, has risen from its ashes, and you now see in the place of the lost other structures equally imposing, two of which are brick, and all in architectural beauty and magnificence of appointments second to none in any watering-place in the world. We have here everything to please the eye, rest and refresh the body, restore health to the enfeebled, and give enjoyment and recreation to the seeker of pleasure. There are many things of which we feel justly proud: Our magnificent beach affording perfectly safe bathing by its very gradual descent, and regular, hard, smooth surface, with the fast land coming down to the very edge of the water. Our excellent, well-planned sewer system, laid down in almost every one of our streets, having sufficient fall to quickly carry off all effete matter far away from the town, giving such a sanitary condition that the mortality of both city and county is the lowest in the State. This is not a thing in prospect depending upon companies to complete, but *un fait accompli*, and that by our own efforts. Our State Board of Health, through its Secretary, has expressed unqualified approval and commendation of our system. Nor are our hotels or boarding-houses a whit behind in their internal sanitary arrangements. Not less than \$10,000 was expended in this hotel alone during last year in replacing and improving its drains and general sanitary arrangements. The same care has also been exercised in all our other hotels, both large and small. We believe we can safely assure our visitors against dangers from septic influences. Our water supply is in most excellent condition, furnishing about one million gallons daily, and distributed through all the most thickly-settled portions of the town, giving an abundant supply of excellent, pure,

fresh water, not from surface springs, but drawn from the very bowels of the earth, and stored in three large tanks, and from them distributed through mains to every part of the city, furnishing a freshly-drawn supply constantly, and not from stagnant ponds or reservoirs. Our fire department is worthy of mention, consisting of two steam fire engines of the best construction, with hose carts, hook and ladder truck, and a well organized and drilled fire department, a pair of well-trained, powerful horses, and kept by the city ready at the first tap of the bell to draw the engine to the place of danger. Our costly experience of '78 has led us to see well to it that every possible appliance is ready to meet such emergencies. Our beach-drive, extending from the western limits of the city to Cold Spring Inlet, on the very edge of the surf, a distance of four miles, needs no comment, as it is only necessary to see it to admire it. Then, too, with just pride, we can point to our noble iron pier, which you can now see nearing its completion—stretching out its long arms to the winged messengers of the deep, and inviting them to fold their wings and rest themselves by its strong sides. It is 1,000 feet in length, and 30 in width; at its terminal end a depth of 20 feet of water furnishes no less than six landing places for vessels, at which they may rest in security. It is built by the Phoenix Bridge Company, of Pennsylvania, whose very name gives a guarantee of its security and completeness. The immunity which the trend of the shore line, and a natural breakwater about two miles from the shore, gives us from the destructive force of the waves in heavy storms, will make our pier a resort for steam and sailing vessels during all the year. Then, too, not to be behind other places of resort, a noble elephant rears his huge head and body about one mile west of the town, and will undoubtedly be as great a source of wonder and amusement as the celebrated "Light of Asia" of Barnum, or at least of his compeers of other places. We would only mention our drives about the city, along the beach front, and throughout the country, as unsurpassed by any seaside resort. Our two railroads, the one $2\frac{1}{2}$ miles to Cape May Point and Steamboat Landing on the bay shore, the other to Sewell's Point, two miles to Cold Spring Inlet—both in a short ride carrying visitors to as good sailing and fishing grounds as can be found in the State. We will not consume your time by mentioning facts relative to our humidity, temperature, and prevailing winds, but would refer to a very able report of Prof. Smock, Assistant State Geologist, well worth perusal by all seeking healthful, pleasant resorts, either summer or winter. Some remarkable facts are brought to light in this report, giving us the advantage over all other seaside resorts in equableness of temperature in this country, with the single exception of Key West.

I fear, gentlemen, that I have already trespassed too long on your time and patience, and will therefore close by again bidding you welcome, hearty welcome to the hospitalities of our city, and trust that you will frequently in the future cheer us with your presence.

The minutes of the last annual meeting were read and approved.

On motion of Dr. Godfrey, a cordial invitation

was extended to all physicians of this and other states who were present to seats as corresponding members.

The following delegates from the Medical Society of Pennsylvania were present: M. O'Hara, J. Kean, H. F. Formad, W. Little, W. R. Crinnee, E. L. Evans, D. F. Willard, C. M. Seltzer, C. R. Pratt, W. P. Waugh, W. B. Ulrich, F. Woodbury, J. M. Backus, C. B. Nancrede, L. K. Baldwin, F. B. Hazel.

Dr. Ingersoll, delegate to American Medical Association, read his report.

Dr. D. C. English, delegate to the Medical Society of Connecticut, and Dr. Benjamin, delegate to the Medical Society of Pennsylvania, also read their reports. All were on motion referred to committee on publication.

Dr. E. M. Hunt stated that the Massachusetts Medical Society was in session at the present, and that our delegate, Dr. E. Worth, was in attendance at the meeting.

REPORT OF COMMITTEE ON MEDICAL ETHICS.

The standing committee acting as a committee on medical ethics would report in the case of appeal of Dr. Warman from the Mercer County Medical Society, that there is no ground for appeal.

Committee: T. J. Funk, E. J. Marsh, and S. C. Clark.

Dr. Wickes then read his address as President. The Doctor took for his subject "Living and Dying; its Physics and Psychics." He called attention to the mystery of life and its termination, and showed how at the beginning man, whose life was counted by centuries, and was terminated by the completion of time, was free from sickness and accidents, and vices due to heredity, and that these causes, active throughout the duration of man's existence on earth, have gradually reduced the individual's tenure of life to three-score and ten, with a limit of one hundred years. Buffon's researches in this connection were noted, and the ratio between the age of complete development and duration of life. He shows how this ratio is found throughout the animal kingdom, and deduces the law that governs the limit of man's life.

The importance of the physician properly understanding and appreciating the various phenomena indicating the approach of death and its presence was mentioned, and then the speaker described the way in which death makes its attack upon life. He described the symptoms present when death comes by the heart, the lungs, and the brain, and spoke of the importance of appreciating and understanding these phenomena in order to meet if possible the tendency to death. Graphically he pictured the oncoming of death, and the physiological course and results of the succeeding events in each case.

The evidences of impending dissolution were narrated: the restlessness, the decubitus, the catching at the bed-clothes, the automatic movements, the thirst, the changed countenance, the cessation of delirium, the gradual lowering of temperature, and the end.

The doctor further considered the signs of death—the cessation of function, the changes in the eyeball, the loss of heat, the settling of the blood

in the dependent parts of the body, the rigor mortis, and lastly, decomposition, first seen in the discoloration of the abdomen.

The act of dying was portrayed as one resembling sleep in every feature, except duration. Natural death is not painful; the old man, at the end of a long life of health, loses one by one his special forms of life, his senses, and at the end quietly, peacefully ceases to exist. But coming, as it usually does, to us through pain and sickness, death is feared as a painful event, but the actual cessation of life is not.

The "fear of death" was found present throughout antiquity, but only as a termination of worldly pleasures; even to the early Christian death was a joy, a pleasant exchange; it was the mediæval church that brought in the horrors of the charnel house into the daily thinking of mankind, and held up the fears of retribution to embitter the end of life.

The fear of death is mainly confined to the moment of death, and is found most active in those in the middle third of life. The very young can not understand it; the adolescent, in their strength, do not appreciate it. The old, by a curious mental process, become indifferent, and simply await the inevitable.

The conduct of the individual in the presence of death varies; many preserve consciousness to the last; many have illusions, and see visions; many seem to have deliriums; others, an exaltation of the spiritual sense.

These same hallucinations appear as dreams in sleep or as accompanying the phenomena of anaesthesia, and are not dependent, as often thought, on the development of the soul into a new life. "The mental experiences of the death-hour are quite uniform. Men usually die in the same moral and mental state in which they have lived. God does not in the final hour work a miracle to improve on the constitutional make which he gave at the creation."

The doctor closed by portraying the position of the physician toward his patient in the time of death, his grave responsibilities, and the necessity for having the honor and pride of his professional work take the place of greed for gain. The memory of a finished life he described as follows: "We have seen the fruitful overspreading tree against the cold auroral-tinted sky of a winter's sunset—its beauteous summer foliage withered and gone, its fruits all garnered—but its graceful and harmonious outlines tell of its spring bloom, its summer beauty, and its autumnal fruitage. It foretells as well its richer products in the future. So is a finished life: its fruitage is over, but its fragrant memories recall its outlines, full of grace and beauty, as they foretell the rewards in store for one who has served well his God and his fellow-man."

On motion of Dr. Garnett, the thanks of the society were voted to the president for his interesting and instructive address, and a copy requested for publication in the transactions.

REPORT OF THE STANDING COMMITTEE.

The report of the Standing Committee was then read by Dr. T. G. Smith, chairman:

This report is based on the reports of the reporters of the county societies. From these reports

it would appear, that during the last year there has been much less disease present than usual; the death-rate has been much lower. The direct dependence of this fact upon the meteorological conditions of the year is very evident; the cool summer, the prolonged autumn, with its bracing weather, the regular rainfall, the winter steadily cold without great changes in the temperature—all these conditions were favorable agencies in reducing the mortality from climatic causes.

Diarrhoeal diseases in the summer, and diseases of the respiratory organs were noticed of diminished severity, and much less prevalent. Epidemics have not prevailed to any great extent. Scarletina and diphtheria were much less prevalent than the year before. Measles was widely present, however, but mild in character and rarely fatal. Again, the common forms of fevers were less severe than usual.

The formation of the Cape May County Society is noted. This completes the roll of the county societies in the State.

The reports contain, also, individual reports of cases and the experiences in the treatment of disease.

Dr. Hulshizer advocates the use of larger doses of quinine than is common.

Dr. Way finds that salicylate of soda is the treatment for rheumatism. From various sources aconite in small and repeated doses is recommended in the same disease. The treatment of diphtheria is as varied as the reporters' names—steam, lime-water, tincture of iron, common salt, alcohol, bichloride of mercury, etc.

Dr. Morris reported a case of congestive chill relieved immediately by blood-letting. From Bergen is reported the value of aconite in pneumonia, this drug to be followed by phosphorus. In Monmouth county digitalis in large doses has been used in typhoid fever.

Dr. Downs reported a case of encephaloid disease of the omentum. A long illness preceded death, which was interpreted differently by various observers; an acute mania just previous to death drew attention to the brain, but an autopsy showed only the changes in the omentum, and which had not been recognized during life.

Dr. Miller reported a case of senile gangrene, with loss of nine toes by sloughing, with good recovery.

Dr. Phillips reports a case that he has twice treated for scarlatina.

Dr. Carell reported two cases of abscess between the folds of the colon, terminating by a discharge of pus from the rectum; also a case of kere-hepatic abscess evacuated through the lungs.

Dr. Lewis reported a case of hydrocele treated by injecting the sac with carbolic acid, with good result.

The following papers accompanied the report:

"A New Mode of Malarial Poisoning," by Dr. Stickler; "The Artificial Alimentation of Infants," by Dr. Turney; "An Epidemic of Scarlet Fever and Ulcerated Sore Throat at Bridgeport," by Dr. Oliphant; "Homœopathic Remedies," by Dr. Stephenson; "Venesection," by Dr. Morris; "Annular Disease of the Ear," by Dr. Chambers; "Chorea," by Dr. Clark; "Ovulation without Menstruation"—a case—Dr. Shannon; "Bright's Disease"—a case—Dr. Thomp-

son; "Histories of Several Interesting Cases," Dr. Welch; "Diaphragmatic Pleurisy," by Dr. Mebray; "An Extraordinary Case of Muscular Hypertrophy of the Stomach," by Dr. Marcy.

Among items of medical interest are noted the publication of the "Archives of Pediatrics," by Dr. Wm. P. Watson, of Jersey City; the establishment of a course of instruction in the diagnosis and treatment of diseases of the eye and ear, by Dr. C. J. Kipp, at the Newark Eye and Ear Infirmary; the successful progress of the "Society for the Relief of Widows and Orphans of Medical Men of New Jersey;" the "Progress of Burlington County Hospital;" the "Discontinuance of the Hospital for Women in connection with the Home of the Friendless in Newark;" the "Occurrence of Malarial Disease at the Newark City Home at Verona, its Relation to Polluted Drinking Water," and the "Establishment of a New Hospital," the "City Hospital," capacity about sixty beds.

The necrology of the year was as follows:

Dr. Rush Bateman, of Cedarville.

Dr. Paul S. Heritage, of Mantua.

Dr. J. C. Fitch, of Hope.

Dr. L. M. Osmun, of Phillipsburg.

Dr. J. A. Summerville, of Union Hill.

Dr. J. C. Weatherby, of Clarksboro.

Dr. J. W. Cuyler, of Morristown.

Adjourned for the day.

(To be continued.)

A British Tribute to the Late Professor S. D. Gross.

The *Brit. Med. Jour.*, May 10, 1884, concluded a very happily-worded obituary of Prof. Gross, as follows:

"His last appearance in England was on the occasion of the meeting of the British Medical Association at Cambridge, when he was one of the recipients of the degree of LL. D. conferred by the University in the Senate House. "To receive that honor," he wrote to the President, "I will come, old as I am, and liable to sea-sickness as I am." The venture was regarded with some anxiety by his family, and he was attended by one of his sons; but he came and returned in safety. He was warmly welcomed by his numerous old friends, and made many new ones, who will never forget him; and at his parting not a few tears were shed. Few who were present at the banquet in the Hall of Trinity College will have forgotten the most memorable incident of the feast, when the noble patriarchal form of Samuel Gross rose on the dais with folded arms, and addressing them as "men and brethren," in a speech of weighty words, well worthy of the man and of the occasion, bore testimony to the high merits of British surgery and the British nation, and expressed his strong conviction that two such peoples as the British and American must ever be united by the bonds of brotherhood and mutual admiration. He felt, and we must all feel, that this union, so important to the welfare of mankind, is not a little promoted by the fraternization of eminent men from the two sides of the Atlantic at the meetings of our great associations. The more our brethren from the far west come among us, the better shall we be pleased; and the more they resemble the noble man whose loss we deplore, the more sincerely shall we reverence and admire them."

Germanic Cremation in Russia.

The burning of dead bodies was an universal rite with the ancient Germans and the kindred Anglo-Saxons and Scandinavians. In *Fire Burial among our Germanic Forefathers*, by Karl Blind (Longmans & Co.), which gives a short "Record of the Poetry and History of Teutonic Cremation," the following occurs: "Among Northmen abroad fire-burial was continued down to the tenth century. In Orkney and Shetland the heathen Northmen practiced for at least a century and a half the fire-burial customs which they had brought with them from Norway. (See introduction by Mr. Joseph Anderson to the *Orkneyinga Saga*.) The same was done in the tenth century by the Warangian rulers of Russia, who had given the country a Norse dynasty and aristocracy, and probably even its name. A striking picture of those Germanic cremation rites in Russia has been handed down to us by Ahmed Ibn Fozlan, an Arab ambassador from the Khalife Al Moktador, who, in 921, wrote a report of his journey. His description is one of the most graphic, the minutest details being given. 'You Arabs,' said one of the Northmen in Russia to Ahmed Ibn Fozlan, 'are fools! You take the man whom you must have loved and honored, and put him down in the earth, where vermin and worms devour him. We, on the contrary, burn him up in a twinkling, and he goes straight to paradise.'"

The Sanitary Condition of To-day.

Dr. Wythe, in the *Pacific M. and S. Jour.*, for March, 1884, says:

"The sanitary condition of the great cities of the world to-day is vastly better than of those of the middle ages, although very far from what common prudence deems desirable. It is still true that people live longer in rural districts than in cities, yet ever since civilization began to inquire into and regulate public hygiene there has been steady improvement. Statistics may not yet be fully reliable, yet the best we have prove that life has been prolonged by civilization. According to Wagner, 'In the 20th year of life the probable survival was in the 16th century 22 years; in this century, 40 years.' Among children, the death-rate depends upon the social position or high civilization of the parents. In England, according to the tables of Mr. Ansell, of 100,000 children born alive, 74,000 will live at the end of their fifth year; but among the upper classes, who can afford the appliances of modern life, there will be 87,000, and among the peerage there will be 90,000."

Something of Interest about the Gorilla.

From a foreign exchange we learn Professor Alphonse Milne Edwards laid before the *Académie des Sciences*, at a recent meeting, a photograph of the young gorilla which has just died at the Jardin des Plantes. This little animal was the first representative of the genus gorilla that had ever been seen alive in Paris, this variety of anthropoid ape having been hitherto known only from descriptions of travelers and from the anatomical remains of individuals killed by the natives. Professor Milne Edwards gave an account of the

habits of the gorilla, and of its savage, untamable disposition, which, up to the present time, has rendered its education impossible. The intelligence of this ape, the largest and most formidable of all known species, is very far below that of other anthropoids, such as the chimpanzee or the gibbon.

Items.

—Bellevue Medical College has adopted a rule that its diploma shall hereafter be in English instead of Latin.

—Puscher, the Nuremberg chemist, says that paste made of starch, glycerin, and gypsum will maintain its plasticity and adhesiveness longer than any other cement.

—The palace of the ex-Empress Eugenie, at Marseilles, which she was obliged to give back to the city, has been turned into a medical school for the training of army medical officers and others.

—Drug clerk to diffident young lady—"Wish to get something?"

Young lady, muttering—"I really believe I've forgotten what I came for."

Clerk, who catches "onto" the last words—"Camphor; how much, please?"

—"Doctor," said the grateful patient, seizing the physician's hand, "I shall never forget that to you I owe my life."

"You exaggerate," said the doctor, "you only owe me for fifteen visits; that is the point which I hope you will not fail to remember."

—"Gimme foive eints worth o' medicin' in the bottle, wud yez?" said a wild-eyed boy of about fifteen, as he handed a pint bottle to the placid drug clerk.

"What kind of medicine?"

"Fwy medicin, av coorse, medicin; fwat d'yez suppose?"

"What are you going to use it for?"

"An' fwat's that to you? Gimme the medicin, an' be axin' no questions."

"Unless I know what you want, I cannot serve you."

"Ye can't! An' it's you a druggist an' not know fwat medicin is? Medicin! I tell yeez, med-i-SIN."

QUERIES AND REPLIES.

EDS. MED. AND SURG. REP.:—

Will you be kind enough to give in your journal soon some information in regard to the climatology of the western shore of Chesapeake Bay, the region about Fort Monroe and the sea coast of Virginia? Is it malarious along the salt-water shores at all seasons, or not so at any time, or only at certain times? Are malarial diseases prevalent at Annapolis, Patuxent river, Fort Monroe, Hampton and Newport News?

W. H.

DEATH.

CURTIS.—On June 9, 1884, of Bright's disease of the kidneys, Dr. George B. Curtis, of Hawley, Pa., in his forty-ninth year.

THE MEDICAL AND SURGICAL REPORTER.

No. 1426.]

PHILADELPHIA, JUNE 28, 1884.

[Vol. L.—No. 26.]

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

A CURIOUS CASE OF NERVOUS DISEASE.

BY THOS. D. WORDEN, M. D., PH. M.,
Of Saratoga, N. Y.

Medical men, having much to do with functional nervous disorders, speedily become familiar with their more constant yet multiform manifestations. Like the Old Man of the Sea, they metamorphose variously, and often curiously. Unaccustomed to the behavior peculiar to this class of cases, *i. e.*, neurasthenic in character, many a physician has been unable to find a satisfactory cause for phenomena to him so unusual and has accordingly suffered, perchance, no little *internal* bedside embarrassment at one time or another.

Having some personal knowledge of the truth whereof I speak, and desiring to contribute a stroke toward the filling-in and rounding-out of a picture by no means too finished, I am led to make a skeleton sketch of a case presenting incidentally some symptoms at once curious and unique.

Miss A—, æt. 25, has a long time suffered from an obstinate menorrhagia. Puberty was achieved with difficulty, and the menorrhagic condition, probably a result primarily of a faulty distribution of nerve-force, soon followed, and thus gradually aggravated the original nervous disturbance. On first examination, patient was found to be thin, anæmic, languid, and possessing little endurance. Spine was tender throughout, and constantly painful in lower half. Headaches (hemierania) frequent. Pain also in region of both ovaries. Uterus retroverted with endocervical inflammation. Palpitation occasional. Appetite capricious, and bowels inclined to constipation. Sleep very light and banished by trifles.

Nervous system greatly lowered in tone. Under treatment, all of these conditions by degrees improved, and at the end of four or five months quite a transformation had been wrought. At this time, a fall slightly concussed the spine, but the effects were soon removed, whereupon the previous general and special treatment was again resumed.

Two weeks ago I was hurriedly summoned at about 11 p. m., to see the young lady, and found her presenting the following curious and interesting symptoms: A tickling sensation in the throat had suddenly given rise to most violent, uncontrollable, and noisy paroxysms of coughing. Subjective sense of pharyngeal and laryngeal muscular spasms, but no dyspnœa. Intense burning and redness, with itching, then developed, extending over the chest, shoulders, neck, and chin. Lips swollen, dark, and painful. A lump, half the size of a hen's egg, rapidly appeared under the left ear, and there was a sensation of general swelling of the throat. Eyelids swollen. Head giddy. Pain so severe as to cause writhing and groaning was experienced just above the pubes and in the groins. Nausea ensued, culminating in free emesis—the pain, however, continuing without abatement.

These symptoms I have given sequentially as they occurred, and they were all compressed within the limits of forty-five minutes. Thinking that the violent coughing had driven the abdominal and pelvic organs down with such force upon the supporting pessary (Hodge's retroversion), as to possibly cause the intense supra-pubic pain, I promptly removed the instrument and then administered, *per orem*, morph. sulph. gr. $\frac{1}{4}$. Under this procedure all symptoms rapidly subsided, and beyond a little "uncomfortableness" the next morning, no disagreeable results remained. To me this was a very unusual manifestation. With no tendency to hysteria, and in the absence of any discoverable exciting cause, I can only look upon it as a rare and sudden disturbance of the equilibrium of nervous forces, resulting in the little tornado of symptoms which swept over the patient as above described. Has any one a better explanation to offer?

THE
Medical and Surgical Reporter,
A WEEKLY JOURNAL,
ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D., } EDITORS.

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THE IMPORTATION OF FOMITES.

At the time of the cholera scare last summer there was a vessel bound from Alexandria to Liverpool loaded with rags. The London newspapers became greatly excited at the prospect of having a pestilence thus brought to their shores. Their anxiety was promptly relieved by a statement of the owners that the infected cargo had been ordered to New York.

This is but one of many instances in which commercial interests have manifested a cynical indifference to the sanitary welfare of the public. In view of this, a very timely ruling of the Treasury Department has stringently forbidden the importation of rags from Egypt unless they have been thoroughly disinfected.

Directions for disinfection have been forwarded to our Consul-General at Cairo, and an inspector has been designated to supervise the process and furnish a proper certificate. It is recommended that one of the following methods should be adopted:

1. Boiling in water for two hours under a pressure of fifty pounds per square inch.

2. Boiling in water for four hours without pressure.

3. Subjection to the action of confined sulphurous-acid gas for six hours, burning one and a half to two pounds of roll brimstone in each 1,000 cubic feet of space, with the rags well scattered upon racks.

These precautions are very appropriate at this time; the more so, as rumors of the prevalence of cholera in the Red Sea ports of Egypt have already appeared in the European papers.

Although medical science has not discovered any remedy for this disease, it has made great and positive advances in checking its progress by hygienic precautions. It is the same with the bubonic plague, with malignant typhus, with contagious leprosy, and a large class of similar diseases. Our victory over them has been in keeping them at a distance. To aid in this, the resources of civilized governments are most essential.

NEWS AND MISCELLANY.

The Kentucky State Medical Society.

HELD AT BOWLING GREEN, JUNE 3, 4, AND 5, 1884.

Reported by Allen Kelch, M. D.

(Continued from page 785.)

WEDNESDAY AFTERNOON.

At the conclusion of the discussion of the report of the Committee on Improvements in Surgery, Dr. James S. Parrish, of Glasgow Junction, reported the following:

May 22, 1878, Mrs. R—, æt. 43, twenty years married, without children, was found to have an enlargement in the region of the right ovary, which had been perceptible for the past six months. To use the doctor's own words: "The uterine, or tumor, presented itself in the umbilical region, having a hard, movable surface, being a little to the right of the median line. Upon examination per vagina, the os uteri is found high up in the sacrum, and turned back towards the vaginal cul-de-sac very much shortened, and presenting a broad, indurated surface." At the end of the examination, says the doctor, the diagnosis not being made out (though I gave it as my opinion that it was an ovarian tumor) we all agreed to give the patient some general alternative treatment, and trust awhile to nature. The doctor says he "heard no more of the case until June 3, at which time he received a dispatch to meet the doctors at Smith's Grove for the purpose of aspirating the tumor. After another consultation, in which Dr. George Ewin was present, we agreed to aspirate the tumor with a view of its shedding more light upon the case."

This was done on the 4th of June, and a small quantity of straw-colored fluid drawn off, when, syncope supervening, the operation was curtailed and another consultation held. The following, and for several days subsequently, her pulse was 110 to 118, and temperature 100½ to 102, followed by diarrhœa.

To cut a long story short, she was removed to her home in the country, about fourteen miles, on the seventeenth day after the operation. About a week after, she was seized with severe pains, and her husband, a Rev. Mr. R., sent for the nearest physician, some two miles away, and in the meantime, while awaiting his arrival, his wife was up over the vessel, when she felt something give way, and commenced passing out at the bowel. The Rev. Mr. R. grew very much excited to see this, and on the arrival of Dr. H. he expressed it as his opinion that the sac of the tumor had passed. The doctor submitted the case with a hope that the society would express an opinion as to whether or not it is an ovarian tumor with sloughing and spontaneous cure, or what character of tumor it might be.

Dr. Pinckney Thompson, of Henderson, read a paper on Typhoid Fever. He said: "As I am on record in the last publications of the Kentucky State Board of Health as to the etiology of typhoid fever, it is not now necessary for me to repeat those views already expressed. In the limited time of a paper before the State Society, it is impossible to speak of its pathology, and I have

therefore to-day concluded to speak concerning its treatment.

"It is of the utmost importance that an early diagnosis should be made. When a doubt exists as to the character of the case, which is not infrequent, as sometimes continued malarial fever closely simulates it, my advice is to test it with such remedies as will remove the doubt as to its malarial character. This being done, and the typhoid nature of the disease established, the next important matter is to consider what are the dangers and what the remedies as the case progresses.

"Typhoid fever is a disease that has a distinct clinical history, runs a distinct course, and in my judgment is never aborted by remedies. The two first great important conditions to consider are the heat that necessarily develops—the consuming fire—which, in my judgment and experience, the majority of patients succumb to, and the involvement of the heart in the way of partial paralysis. In making the diagnosis of typhoid fever, it is not necessary to regard some disturbance of the alimentary canal as an essential factor to establish the existence of the disease. In some of the cases of the most inveterate type, I have found no such disturbance, but on the other hand a sluggishness amounting even to constipation. One case in particular impressed me. I saw a case in consultation some three years ago, a young lady 22 years of age. She had been sick twenty-two days. When I first saw the case, I pronounced it my opinion that the young woman had typhoid fever. Four days later she died, and twenty-four hours after death the autopsy revealed a perforation of the ileum.

"In controlling the heat that is usually developed in this disease, there is nothing so efficient in my experience as cold water. It need not be so cold as to produce the shock which is objectionable. I do not believe it necessary ever to have it below 75° or 76°, nor above 90°. It abstracts the heat, and should be repeated as often as necessity requires as guided by the thermometer. The manner of applying it is of the utmost importance. The immersion bath has been recommended. This not only involves considerable expense and inconvenience, but is oftentimes impossible to accomplish. I prefer the sponge bath, which is easily applied, not expensive, and in the hands of every one. It should be used as heat demands.

The next important thing is to sustain the heart's action, and the best agent to accomplish this and lower the temperature is, in my experience, alcohol. Another important remedy I have found satisfactory results from in the early stages, in reducing the temperature and controlling the circulation, is salicylic acid in ten, fifteen, or twenty-grain doses. It must be watched, however, on account of its depressing effect upon the head.

Digitalis, in connection with mineral acids, as recommended by Dr. Flint, especially in connection with phosphoric acid, has given in my hands excellent results. I have also given the acids with strychnia. In the latter stages of the disease, used in connection with belladonna, the heart's action is sustained, while at the same time the bowel troubles have been greatly mitigated. When, in spite of all, an excessive diarrhœa with a

tendency to fatal hemorrhage supervenes, I know of nothing better than opium and subnitrate of bismuth.

An important feature of typhoid is the frequency with which intolerance on the part of the stomach manifests itself. I have seen cases where ice and subnitrate of bismuth were equally promptly expelled, yield at once to iodine largely diluted in water, given every thirty to sixty minutes, or two hours, as the case may require.

It is not necessary here to speak of the necessity for cleanliness in all respects.

In conclusion, let me assure you, gentlemen, there is no disease the physician is called to treat that demands from first to last a more rigid adherence to the principle of symptomatic treatment than typhoid fever.

Dr. J. L. Taylor, of Greencastle, reported a case of typhoid fever which presented a typical history of the disease up to the eleventh day, at which time the temperature fell to 97°, and continued so through all the remainder of the case, which was characterized otherwise by the usual symptoms up until the twenty-second day, when it rose to 99°, and continued to vary for a few days, when convalescence was declared.

Dr. Wm. Bailey, of Louisiana, said: "I regret exceedingly that the first paper did not discuss the disease rather than the treatment, because the whole rational treatment of the disease depends upon the conception of it which is formed. I think it a specific infectious disease, due to a poison which produces it and no other malady. I believe it to be due to bacteria—that we have the passage of it through the system bringing about a group of symptoms separate and distinct, which we call typhoid fever. With this consideration then we would be prepared to discuss the paper by Dr. Thompson. This specific poison in the system brings about many important changes besides those it works in the alimentary canal. Not more than 10 per cent. of the fatal cases occur through any lesion of the intestinal tract, though diarrhœa and hemorrhage and perforation are features we must not neglect.

"The disease is fatal in exact proportion to the duration of an elevation of temperature. Undue elevation unduly prolonged lies at the root of most fatal cases.

"I am a confident believer in the benefit that comes from the reduction of temperature by antipyretics. Of them some have been commended, some have been rejected. I think no man, since the article on typhoid fever by Leibermeister, has a right to reject these remedies until they have been given an extensive and impartial trial. No man ought to speak against the antipyretic efficacy of quinine until he has given it in antipyretic doses. I know of no reason why quinine should be more objectionable to the stomach than salicylic acid.

"Alcohol, when we begin to near the natural termination of the disease, meets a good indication in supporting a weakened heart. To it alcohol acts in the nature of both the 'oats and the spur.' It feeds the heart by the stimulation and dilation of its own vessels; and as to quinine, I would advocate its employment in antipyretic doses whenever the thermometric record runs above 104°. This occurs about the third week of

the disease. Having given a decided dose, say twenty grains, I should expect to find no indication to repeat it short of forty-eight hours, because the temperature does not again readily rise."

Dr. J. A. Larrabee "desired to congratulate the doctor on the course advocated, as it augured a disposition in the management of typhoid-fever to return to first principles. It is beginning to be discernible in the discussions of societies, that symptoms which are valuable to the physician at the bedside exert a controlling influence upon the measures of treatment adopted. All rational physicians ordinarily at some time in the course of typhoid fever resort to the use of alcoholic stimulants. That alcohol reduces temperature can no longer be doubted; the manner in which it does so should occupy some attention. I can not agree with Dr. Bailey that it acts as the 'oats and the spur.' It decreases temperature by paralysis of the arteries, allowing the blood to flow more freely to the surface. If this be the case, it must lessen instead of increasing arterial tension. In regard to salicylic acid, I must add my testimony from my own experience to that which has gone before, that, while it is a very powerful agent to reduce temperature, it does it at the expense of the circulatory system. It produces exactly the same disturbance as quinine, only more intense. Digitalis, I recognize as a heart food, but even it must be used with caution, for it is not without danger. The heart belongs to the body and shares in the general debility, and under digitalis too great a muscular tension may destroy life by the spasmodic closure of the ventricle. With regard to the management of the intestinal trouble, turpentine has long enjoyed a deservedly high place in the professional estimation. When the dry tongue appears, when there are present evidences of inflammation of the mucous membrane, then the astringent, alterative effect of turpentine is desirable.

"The thermometer is undoubtedly a great benefit to the physician in these cases of typhoid fever: by watching its markings the danger is frequently pointed out before it is upon the patient. That high temperature is a factor in producing death cannot be doubted. That we can abort the disease is not held at the present time; we are therefore in for the management of it, and the word management is perhaps more expressive of our objects than the word treatment.

"With regard to the reduction of temperature by water, I think it a good plan, but I would not advocate the immersion of the body; especially are the movements necessary to accomplish this of great harm in the trembling stage of the disease.

"In malarial districts we often have a prodromal stage, resembling typhoid fever, and this is followed only by malarial fever; but by practice the early indications of typhoid fever become impressed upon the physician. There is a manner, an appearance, a language of the body, that stamps the man who is about to have developed this disease, which marks it above everything else."

Dr. D. W. Yandell, of Louisville, was understood to say: "I feel really there is no subject that possesses more interest than this, because this is a general interest. It is interesting to me

to note the treatment at the present as compared with the treatment 24 or 25 years ago, which I suppose was fairly represented in the treatment of my own case at that time. I thought it was malarial in the beginning, and I took forty grains of quinine, which served to increase my headache and general discomfort. Dr. Rogers came and prescribed sixty other grains in three separate doses. I was soon very deaf, and have not recovered to this day; not because of the quinine, but because of other troubles. Rogers thought I stood a good chance of dying in the first week, of nausea, but I finally passed over that period, and then during eight other weeks I was delicious. Throughout the whole of that time I was required to take food every three hours, and then every two hours, and then finally every hour. I was constipated for a week at a time; at the end of a week I would have an injection, and finally, three weeks after the delirium had passed, I was able to stand up. I am satisfied that in this case food was sometimes given at the expense of my convenience, therefore in my own person I have been trying Tanner's method somewhat. In an attack of rheumatism two years ago, thinking it might possibly help me, I made a fast of eleven days, but it did no good. I commenced taking food again, and in due time it passed off. In the winter just passed, I fasted twenty-one days, literally without food. At the end of that time I did not feel any particular inconvenience nor loss of strength. In the last two years I have treated five cases of typhoid fever in this way; that is, I have been governed entirely by the desires of the patient. Food was forced upon me for nine weeks; I took it, never without remonstrance, and always with disgust. Last July I treated a case in the person of a young man from Lexington. He went seventeen days with about two or three glasses of water. During that time he had one or two actions from his bowels; on the twelfth day a little diarrhoea, for which he took some chalk mixture. He made a good recovery; got well somewhat more rapidly I think than ordinary cases.

"Touching the use of quinia. In 1865, Dr Rogers and myself were thrown much together. The result of his experiments and my own carried out through '65 and '66, was to this effect, that at no time in the history of typhoid fever or typho-malarial did quinine produce any perceptible good, but that after the fever began to subside, to show some disposition to take a periodical form, at that time it was beneficial. I was quite surprised to hear a gentleman say he had encountered no inconvenience from these large doses of quinia. My observation has been just the reverse. The sixty grains made me just that much more wretched, irritable, and excited. I remember to have seen a case in consultation with Dr. Foree (and I think he was one of the most sagacious practitioners I have ever known), in which the disease in the person of a doctor lasted twenty weeks. Time and time again the question was discussed between us when his temperature ran high; still we withheld it till the fever showed a disposition to abate or assume a periodical type. At the end of that time it fell to 100°, then rose to 102°. Foree said, now is the time for quinine. I gave him ten-grain doses every two hours until he had taken forty grains. It reduced his tempera-

ture, and it remained down from twelve to eighteen hours, then it went to 104° again.

"These are the experiences of Rogers and Foree; my own is to the effect in typhoid fever precisely as in surgery. You can reduce the temperature with quinine or salicylic acid as low as you choose, and keep it there under the continued administration of the drug, but the moment you withhold it, the temperature goes back to where it was, and sometimes beyond. I have yet to see that quinine possesses any real power over the course and progress of that malady.

"Now, with reference to the use of water. The application of the wet sheet, as practiced with my father, won the prize for the best essay on this fever in 1840. I was glad to hear the gentleman say he used hot water. It reduces the temperature in the course of an hour, and I think it a good plan to sprinkle the blanket with water at such temperature as proves grateful to the patient.

"So, then, the three points I make are, first, as to food; next, that quinine possesses no curative powers whatever in this disease, and whatever good it does is purchased at the expense of the comfort and convenience of the patient; and next, that water is the best antipyretic, when properly used, that we possess for this disease."

Dr. Holland agreed with Dr. Bailey as to the efficacy of large doses of quinine at long intervals, and had seen excellent results from the practice. Given fifteen grains in the early morning, patients will rest comfortably throughout the day frequently, and pass a better night, feeling refreshed from its effects.

At the conclusion of this discussion, Dr. D. W. Yandell presented to the individual members of the Society the following memorial, neatly printed on handsome sheets for framing:

In Memoriam.

WITHIN THIS URN LIE THE ASHES OF

SAMUEL DAVID GROSS,

A MASTER IN SURGERY.

His life, which reached the extreme Limits of the Psalmist, was one unbroken process of Laborious Years.

He filled Chairs in Four Medical Colleges in as many States of the Union, and added Lustre to them all.

He recast Surgical Science as taught in North America,
Formulated anew its Principles,
Enlarged its Domain,

Added to its Art, and imparted fresh Impetus to its Study.
He Composed many Books, and among them,

A SYSTEM OF SURGERY,

Which is read in different tongues, wherever the
Healing Art is Practiced.

With a Great Intellect, carefully trained and balanced,

He aimed with undivided Zeal

At the Noble End of Lessening Human Suffering

And Lengthening Human Life,

And so rose to the Highest Position yet attained in Science

By any of His Countrymen.

Resolute in Truth, he had no Fear, yet he was

Both Tolerant and Charitable.

Living in Enlightened Fellowship with all Laborers in the

World of Science,

He was greatly Honored by the Learned in Foreign Lands
And deeply Loved at Home.

BEHIND THE VEIL OF THIS LIFE THERE IS A
MYSTERY WHICH HE PENETRATED ON THE

SIXTH DAY OF MAY, 1884.

HIIS MEMORY

Shall Exhort and his Example shall Encourage and
Persuade those who come after him to Emulate
Deeds which, Great in themselves,
Were all Crowned by the Milk-white Flower of a
STAINLESS LIFE.

Dr. A. W. Johnston, of Danville, read a paper on "Bigelow's Litholopaxy." Briefly he began by urging upon the profession a more careful investigation of their urethro-vesical cases: stating that as they are now managed, many stones are found for the first time on the autopsy table. Before we had so many instruments of precision, this might be pardonable; but now a practitioner is as often to blame for letting a man die with a stone in his bladder as he was in old times for cutting him when none existed. Stone is never the disease itself, but only a symptom or complication of some other trouble, and therefore it should be carefully and repeatedly sought for in all persistent cases. By personal experience he recommended the use of Bowman's stethoscope in auscultating the vesical region while the sound was moved about the bladder, as it magnifies the sound of small and soft phosphatic stones, as well as giving an intelligent idea of the condition of the vesical wall. The statistics which he gave on the various methods of removal were for lithotomy one death in eight between 17 and 40, and one in four above that age, while nearly all recover below 17. The best that ordinary lithotripsy had ever done, in spite of the most careful selection of cases, was one in seventeen, whereas litholopaxy, taking nearly all stones and constitutions to adult life, loses only one in 334.

Formerly every small soft stone in otherwise healthy patients was crushed. Now, however hard uric, weighing as much as 1,000 grains, and good-sized oxalates, are successfully removed from patients with almost all sorts of known complications, the organic obstructions only serving to make us more careful in the operation. F. N. Otis made this operation possible by demonstrating the real calibre of the urethra, but to Bigelow belongs the credit of connecting the tolerance of the bladder that had already been seen by several, with Otis' ideas—and then litholopaxy was born. The operation is being done on a large scale all over the known world, except in the Western, Middle, and Southern States; and the only reason that he could give for its backwardness there, was their proverbial dislike of details—for as in ovariectomy and extraction of cataract, it is now proved that it is gentleness and not dazzle that the bladder most approves.

He then gave a case in detail from which two months before he had removed 300 grains of phosphates through the narrow urethra of an enlarged prostate, the patient receiving great relief. As he did not bear the anæsthetic well, the operation had to be stopped before all the fragments could be removed, about forty grains being passed since. From the paresis caused by the hyperdistention of the bladder from the amount of water used, the organ cannot wound itself on small particles left behind, and we do not fear the reactions where only the amount that the viscus is accus-

tomed to is used. However, we should not trust to this, except where we are forced to, but should remove every particle that can be found. As the prostatic bar could not be safely removed, he expected to have to watch his patient carefully for some time to come, as it might again start the same chain of sequences, and like Thompson, he might repeatedly have to remove small concretions; but as he was 60 years of age he did not fear much reaction, for, like Freyer, of Calcutta, he thought the young and strong were more liable to urethral fever.

In speaking of the complications of stone, he said he wanted to enter a protest to what he had once heard a leading surgeon on the New York Hospital staff say, and that was, that by no known method of examination of the urine could we get a satisfactory idea of the mischief that has been done to the kidney by this sort of irritation. Time would not permit him to speak in detail, but he was sure the close study of the renal detritus would reveal its true condition. Large oxalates must still be cut. The dangers of the operation are of the operators' own making, and begin with the selection of instruments and last all the way through. No step is free from danger to the patient and disaster to the operator, if he does not know what to do and how to do it gently. After going over the various accidents that are most liable to happen to an operator, and giving the way to prevent each, he concluded with the statement that "the greatest dangers are of the surgeon's own making, and that it behooves him not only to be careful in the selection of his instruments, but in every movement he makes with them. No one should undertake this who is not personally familiar with all the urethro-vesical disorders and who is not already a tried surgeon, for in no position could an excited operator do more harm. To those stone operators who have not yet learned this method, I would say, learn it as quickly as possible, for the time is not far off when you must use it or give up your practice. The professional eye is rapidly learning to read the handwriting on the wall, and be assured that it will be but a short time before the uninitiated will with them exclaim: 'Mene, mene, tekel, upharsin!'"

Dr. D. W. Yandell, of Louisville, was understood to say: "I may state what will probably interest the Society, that the two men at the International Congress, two years ago, who attracted most attention after Pasteur, were Bigelow and Billings. Bigelow handles his instruments like a magician. My own experience with instruments is that after they are tested they are more liable to break than before. I had one of Bigelow's instruments sent to me by his own maker, and the first attempt I made to use it, it broke, and I had afterwards a very difficult cutting operation to do to get out the fragment as well as the stone. Fortunately, the case recovered."

Dr. Dudley S. Reynolds, speaking on the subject of "Inflammations of the Iris," said in brief: "In order to properly discriminate between various forms of inflammation of the iris and to distinguish these from malarial and tubercular, and certain tumors which are liable to develop in this structure, a little attention ought to be given to the anatomical peculiarities of the iris. It is a network of yellow elastic fibre with fine connec-

tive tissue fibre holding the pigment in place. The pectinate ligament of the iris, which is formed by deflection of the posterior elastic layer of the cornea, serves not only to bind the iris securely to the cornea, but the slips of this ligament are divided continuously to their point of attachment by fusion with the sheath of the constrictor pupillæ muscle. The sphincter muscle of the pupil is the only muscular structure in the iris. It has no radiary muscular fibres, as some seem to think, and as has been long taught by book-makers; it has no arteries nor veins. Its blood-supply comes from a large number of minute arterioles belonging to the long ciliary arteries. These arterioles belong in the network of capillary vessels which ramify the interstices of the iris, and return by venules which begin at the periphery of the iris and lead into the sinus, called the canal of Schlemm. This canal contains a plexus of veins and a large number of lymphatic vessels. When the pupil of the eye is contracted, the iris is brought more firmly into contact with the capsule of the crystalline lens. Any irritation in the nature of congestion contracts the pupil, and even the mildest form of inflammation of the iris will in a short time develop adhesions at the point of contact between the iris and the capsule of the lens. This is the great danger in all inflammations of the iris, whether traumatic, syphilitic, miasmatic, or tuberculous. The chief point to be considered by the practitioner is that all forms of iritis require precisely the same local treatment, that this treatment is demanded from the very beginning of the first stage of the inflammatory process until the last vestige of it has disappeared. It is customary to commend the sulphate of atropia for this purpose; and whilst it is in most cases promptly efficient, there are certain objections to it. The only object to be secured by any local treatment in any form of iritis is to dilate the pupil and relieve pain. It unfortunately happens that the sulphate of atropia, whilst it uniformly dilates the pupil, does not always relieve the pain; per contra it sometimes greatly intensifies it by increasing the tension of the eye, and in this often endangering the safety of the organ. The hydrobromate of homatropia, in my own experience, which extends over a period of more than two years of active practice, both private and at the hospital college clinic, covering hundreds of cases, induces me to rely implicitly upon it for a prompt dilatation of the pupil and a prompt diminution of the pain. In all forms of iritis I use a solution of homatropia in the proportion of one grain to the drachm of distilled water, and this instil into the eyes, one drop every five minutes, until the pupil is dilated and the pain abated. I prescribe an interval of not more than three hours for the repetition of the local application. I have never witnessed any constitutional disturbance from the use of this solution, even in children as young as seven years of age.

"All forms of iritis, except the traumatic, require constitutional treatment based upon a consideration of the case, and nature of the constitutional disease which has its local manifestation in the iris. I have seen violently acute forms of iritis arrested in forty-eight hours by the administration of an aperient, followed by one decided dose of quinine, say fifteen or twenty grains of

the sulphate, the local treatment being promptly and persistently carried out. Cases of syphilitic inflammation of the iris require, of course, to be discriminated, if it is possible to do so; if the inflammation has its seat in the iris, gummata will appear in the substance of the iris upon its surface, and upon the margin of the pupil. These will be recognized by a nodular elevation, by interstitial circumscribed swelling, or by tubercular projections from the margin of the pupil; but in some cases the syphilitic manifestation is not present in the iris—it may occur in the ciliary body, in the ciliary muscle, or in the canal of Schlemm, producing an iritis often more difficult to control than that which has its origin in the iris proper. The iodide of potassium in progressively increasing doses, taken always in a glassful of cold water and at intervals of four to six hours, with the local use of hydrobromate of homatropia, and smoked glasses to protect the eyes from light, constitute as nearly a specific line of treatment for syphilitic iritis as one may desire.

"To recapitulate now: all forms of iritis should be treated by the local application of some non-irritating mydriatic, the best of which is hydrobromate of homatropia; next to this, daturia stramonium, or its alkaloid, the sulphate of daturina; next to this, the sulphate of atropia or duboisia. The constitutional treatment shall be of the nature suggested by the character of the constitutional disease which has caused the iritis."

THURSDAY'S SESSION.

Dr. T. D. Finck, of Louisville, read a paper on "Phlyctenular Conjunctivitis." As illustrative of a want of thorough investigation of the pathology and etiology of very common diseases, he cited two cases occurring in children subsequent to an attack of measles, and which by many practitioners would be said therefore to be due to that as a cause.

"These cases," said he, "are interesting, inasmuch as this disease counts amongst its sequelæ catarrhal conjunctivitis. But the pathology of phlyctenular conjunctivitis consists in a rupture of a lymphatic in consequence of an engorgement. Lymphatic inflammation is attended by increase of the lymph-cells both in number and size; the vessels are burdened, and as a consequence rupture occurs.

"That the herpes spring up at the corneo-conjunctival junction is due to the fact that the conjunctiva, loosely attached to the globe until reaching the cornea, becomes here firmly adherent to it—then the net-work of lymphatics, having its zone-like origin around the cornea and having its periphery encircled by a large lymphatic, which anastomosing with the net-work around the cornea and at the same time throws down branches to open into the axial lymphatics, which are subsequently united to the submaxillary glands.

"When it is remembered that enlargement of the glands of the neck invariably co-exists with conjunctival herpes, these facts not only explain the reason for the location of the herpes, but go far to prove that phlyctenular conjunctivitis is due to a glandular engorgement, and that measles could only then be considered a factor in its production when regarded as a debilitating cause."

Dr. W. M. Fuqua, of Hopkinsville, read an ex-

haustive paper on "Civilization and Sanitation." In brief Dr. Fuqua took the grounds that disease is very much more frequently of centric than excentric origin, and that therefore much of the present sanitary doctrine is unsound. "Sanitary science, says a recent writer, begins and ends with man; its aim is the growth of an improved race; a healthy, useful, and long life. Public health ever goes hand in hand with true liberty, and is the companion of orderly habits and pure morals. Does civilization essay to do more than this? Are they not mutually interwoven, one the handmaid of the other?"

"Man's duty to himself in the present age is measureless; its path is as broad as the ship's road upon the wide ocean plain. What the present asks is the deepest solicitude of each individual over itself, because a high state of society or civilization, or sanitation, means nothing except an exalted condition of the individuals composing it. All lawful care of self is therefore a form of public benefaction. Whatever diminution of mortality we enjoy from the diseases that formerly depopulated countries, is due rather to a higher civilization than to what is termed Sanitary Science. That at present is synonymous with cleanliness; and as nations emerge from barbarism into civilization, cleanliness assumes greater importance in its relation to individual happiness, comfort and longevity."

Dr. Fuqua's paper was a very excellent one, and deserves a publication in full. His propositions are so mutually dependent upon each other that no abstract can do justice to it, because the harmony of the reasoning is marred by breaking the continuity,

Dr. Wm. Cheatham, of Louisville, read a paper upon "Sympathetic Ophthalmia." He believes it to be produced through the sympathetic system of nerves, the result of continued irritation. Said the writer: "The symptoms of sympathetic irritation, which I contend always precedes inflammation, are slight temporary blurring of vision, fear of light, flashes of light, pupil fails to dilate and contract as normally, and easy fatigue of eyes from use."

"Mr. P., struck in the left eye with a nail six months before he came to see me. The nail made a large wound of the sclera in ciliary region. Four months after the injury, symptoms of sympathetic irritation set in, which was soon followed by plastic irido-cyclitis. When I first saw him vision of both eyes was zero. I advised removal of wounded eye, which was submitted to. By leeching, warm and cold cloths, iodide of potassium and mercurial inunction continued for four months, he returned home with vision enough in right eye to go any where he wished."

"Captain S. lost sight of left eye some years ago from inflammation. Cornea of left eye opaque, synechia posterior with cataract. Some months ago sight of right eye began to fail. When I saw him he could only distinguish daylight from darkness. Left eye was sensitive to neither light nor touch. After trying for a few days treatment with no change for the better, I enucleated left eye, fearing the trouble was sympathetic. He was put on the mercurial inunction. The inflammation of the right eye was plastic in character, and I feared it would go on to suppuration. Leeches

were applied to the temple, the room darkened, and rest in bed advised, and cold cloths applied. In eight or ten weeks he returned to his work with vision $\frac{2}{10}$.

"Mr. C. had choroiditis; left eye was treated by another oculist, who performed iridectomy. Irido-cyclitis followed with closure of pupil. Some weeks afterward a spot of choroiditis started in right eye in supra-temporal quadrant. This oculist advised iridectomy in this eye, with enucleation of the left, against which the patient kicked, and fell into my hands. I treated him for some months, getting vision $\frac{2}{10}$ right eye. He returned home, reporting to me only occasionally. Four months ago he returned with renewed symptoms of inflammation of the right eye, vision $\frac{3}{10}$, and neura-retinitis present. I advised enucleation of the left, to which he consented. In three days the neura-retinitis was greatly improved, and vision doubled. He has gone on improving slowly but steadily since."

"From these and similar cases the inference was drawn, that the advisers of early enucleation, or of enucleation of all eyes that are blind or of no service, because if sympathetic inflammation sets in all is lost, are sometimes mistaken, and for the following reasons: No one can tell at once whether or not a majority of the injured eyes will go blind; and in deciding this question it is important to decide whether this operation of enucleation is, as most physicians believe it to be, a harmless one. Graefe, Pagenstecher, Verneuil, Vignau, and others, report fatal cases. I myself have had severe hemorrhage to follow enucleation in two cases—in one case nearly fatal. In the young it often leads to deformity by contraction of the orbit; occasionally sympathetic ophthalmia is excited by enucleating the diseased eye; when the sympathetic ophthalmia is a serous iritis, the enucleation of the offending eye excites a plastic irido-cyclitis, with loss of the good eye. So it will be observed that enucleation is not entirely harmless. 'Is it proper to advise the enucleation of a hopelessly blind eye as long as the other is normal?'"

"During last winter a young man came to me from Clarksville, Tenn., having been shot in his right eye the day previous. The shot passed through cornea, iris, lens, vitreous humor, retina, choroid and sclera, and into the back of orbit. Of course the latter was not discovered until after enucleation. The young man was a farmer in medium circumstances. I made this statement to him: 'If you will stay here under my observation for some weeks, it is possible that I might save that eyeball for you, and even possible with some vision; there will be great loss of time and considerable expense. Notwithstanding the best treatment I can give you, it is possible that the eye may have to be removed anyhow; there are many chances for this, with some risk of its affecting the other eye and damaging it materially.' With this statement before him, he wisely decided to have it enucleated, when the previously detailed condition of things was found to exist."

"The question of preventative enucleation hinges on other important points besides the dangers of sympathetic ophthalmia: 1st, the ability of the patient to lose the time necessary for appropriate treatment; the nearness of a physician

who is able to recognize sympathetic irritation and enucleate the offending eye; and the intelligence of the patient."

The following conclusions closed the paper: "Enucleation is better performed in the stage of irritation. If it cannot be performed then, operate in the stage of inflammation, for while there is life in the eye there is hope. It should not be performed in iritis serosa. It can be performed at the onset of irido-cyclitis plastica, though the eye causing the sympathetic inflammation may not be blind."

The following resolution was adopted:

WHEREAS, The late Dr. Samuel D. Gross, of Philadelphia, was one of the earliest presidents of this society and always on its roll, it is fit that we should formally add our word of respect to his memory. What we shall say of him is much to us, though it is but a small part of the long sum of testimonies to his worth going up from medical men in both hemispheres. In recognizing his high merits we shall join company with the most dignified and venerable institutions of learning known to the English-speaking race, institutions that have done themselves honor in bestowing honors upon him. It is some comfort to us who mourn him that in the corporate existence of this organization of which he was a founder, *he still lives*. To our remotest year his name shall stand as that of one upon whose full and excellent life, every member may well wish his own were modeled.

Resolved, That as he was a great surgeon and leader of thought, we shall continue to hold his precepts in high esteem. As he was a kind and loyal friend, we shall cherish our memories of his personal dealings with us. As he lived frankly, purely and courteously, we shall reverence in him the gentleman above reproach.

J. W. HOLLAND,
WM. BAILEY,
J. H. LETCHER.

Dr. T. H. Stucky, of Louisville, read a paper on "Catarrhal Headache and Its Allied Affections." After entering into the anatomy and functions of the nose, he said: "In acute coryza we have besides the general lassitude, malaise, alternate chilliness and heat, and more or less weight and pressure about the frontal region especially. Examination in such cases will reveal a thickened œdematous nasal mucous membrane approaching nearly to occlusion, which, in proportion as it nears completeness, measures the frontal uneasiness. The membrane is at first dry; then stimulated secretion occurs, when some degree of ease is secured. The connection between the nasal cavity and frontal sinus is quite direct through the anterior ethmoidal cells and infundibulum. The varying size of the frontal sinuses measures to a large extent the discomfort arising from the extension of the inflammatory process from the nose. A case was cited to illustrate the connection between acute coryza and frontal pain."

Chronic catarrhal rhinitis was discussed by the writer, whose paper was not discussed.

Dr. J. M. Matthews, of Louisville, speaking on the subject of "Operations Upon Hemorrhoids During the Inflamed State," said: "I do not think that any physician or surgeon engaged in practice long will deny the frequency with which hemorrhoids occur among their clients, nor the inconvenience and suffering which it entails upon the subject of them. I was much interested in the remarks of Dr. Holland on the 'Cause of Consumption,' especially those remarks which related to the fact that the disease was unknown among them previous to the advent in their midst of the white man. It is a notorious fact, stated by Dr. Buren, that in his experience among the Indians he never saw one of them with hemorrhoids, and he examined hundreds of them. This

fact has a bearing upon this subject, as well as upon tuberculosis.

"I find in my dealings with this special class of patients that often the symptomatology of the affection is not quite understood. I do not mean to say there is not a physician who can diagnose a case of piles, but that there are quite a number who do not diagnose. I find that even the authors themselves differ as to the pathology of a pile. I take it that a pile is, in reality, a tumor, just as much so as a tumor in any other situation. If this be true, the fallacy of injecting hemorrhoids with an acid for their cure can be readily seen.

"Those persons who have advocated the injection of hemorrhoids have never limited the injection to any special kind of tumor. How is a pile formed? The simple passage of hard feces through the gut, in persons the subject of constipation, repeated at intervals, is sufficient to begin an irritation ending in plastic infiltration of the tissue, the final result of which is a pile.

"I take issue with one of the authorities who characterizes this tumor as a vascular tumor. I take it there is a confusion in this; he means that the tumor is well supplied with blood; in reality the vessel which feeds it can be felt at the top, pulsating with a beat almost equal to that of the radial artery.

"Now, if you will permit, I will say there are strictly three varieties of these tumors: 1. The capillary, where the small vessels push into the folds of the mucous membrane without any infiltration at all. That is one kind, and it is a dangerous kind, from the fact that the circulation is free and rapid. Being fed by an artery of considerable size, if ulceration takes place over it and perforates it, there is danger that the patient will bleed to death. I have seen a case die from this cause. If the chain of morbid phenomena be not here checked, and the inflammation is allowed to continue, it goes on to the formation of the second variety, the venous pile.

"I received a letter after I read a paper last year before this society, from a gentleman in the society, asking me if I was not mistaken as to the veins in the rectum having no valves. In speaking of this, I spoke of the circulation as being very slow and feeble. He took issue with me. The confusion in his mind arose from the fact of the blending of the portal and systemic circulation; it had not occurred to him that reference was had to the absence of valves in the superior hemorrhoidal veins. Some relief is afforded from this condition by blending with the middle and inferior hemorrhoidal. There is occasionally a blending, likewise, with the portal and systemic circulation, and therefore is it that obstruction in the liver causes one kind of piles. Other causes operate differently. It is my experience that piles may exist for weeks or years above the sphincter muscle, and the individual be unaware of their presence. This is a matter of considerable importance, when it is considered that these patients often come before examining boards for pensions or life insurance. They ask the question, 'Have you ever had piles?' and he answers 'No.' Then this individual is taken sick, and during this sickness it is discovered that he has piles, and it renders his policy invalid. Now, admitting their existence to have been determined,

can the necessity of an operation be disputed? I take issue with any man who will say he can cure this kind of pile or tumor by anything else than an operation.

"From a variety of causes piles are liable to become inflamed, and once inflamed they may easily become strangulated by passage below the sphincter; everything is aggravated in this condition, and it may take some weeks to quiet the trouble. It has occurred to me to ask myself the question, why not operate upon them and get rid of them at once? There is no authority that says 'Operate upon a pile during the inflamed state,' but they will tell you to apply treatment to reduce the inflammation. Now I want to state one or two cases. A few weeks ago I was called in consultation, to a distinguished lawyer who was in this condition. The family physician in attendance had tried in vain to quiet inflammatory action for two or three weeks. I found hanging down from the anus two solid tumors. I passed the knife around them and ligated them. I visited him the following morning, expecting to find him in some trouble. To my satisfaction, that man was out of the house in one week.

"Another case, a young man, had a mass of inflamed tissue hanging from him larger than my two fists. It would have taken several weeks to abate the inflammatory trouble, and I ligated the whole mass. I went to see him the next morning. I was told by the people at the house that he had rested well all night, and got up early in the morning and went out. They sent for him, but he could not be found. Three days later I received a postal from Cairo, Ill., saying he was that far on his way home and was all right. When he got home he wrote me that he was entirely well. Since then I have had I suppose five or six cases of similar character, in which the proceedings and results are similar. I have therefore come to conclude that instead of applying remedies to relieve the inflammatory trouble, they should be operated upon at once."

Medical Society of New Jersey.

(Concluded from page 787.)

Wednesday.—The Society was called to order by the President at 10 a. m.

The Special Committee on Education presented the following:

Resolved, That this Society approve and adopt the recommendations of the Special Committee on the curriculum of preparation to be required of persons contemplating the study of medicine in this State, as contained in the report presented at the last annual meeting of this Society.

That to carry out the recommendation of said report in regard to a censorship as therein contemplated, this Society is of opinion that two Boards of Censors be appointed by Standing Committee each year, consisting of five members of this Society, one for the northern and one for the southern part of the State, to whom should be presented for approval the credentials of all persons proposing the study of medicine, and in case of the insufficiency of such credentials, to examine the applicant in the branches of science and learning indicated in the report of the Committee.

That the Standing Committee prepare and report to the Society for its adoption such amendments of its By-Laws as are necessary to carry out this plan and recommendation of the Committee.

That the Corresponding Secretary communicate the action of this Society on this subject to the district medical societies in this State, with instructions to adopt such regulations as shall effectually secure the observance of the measure adopted by this Society in the several localities.

That the Corresponding Secretary communicate the action of this Society on this subject to the State Medical Societies of the several States of the Union, and respectfully request their coöperation with us in this effort to elevate the standing of medical education throughout the country.

The resolutions occasioned considerable discussion, in which Drs. E. M. Hunt, C. J. Kipp, Godfrey, Welch, B. A. Watson, Ridge, Benjamin, and English took an active part.

On motion of Dr. Benjamin they were adopted.

On motion of Dr. E. M. Hunt, the following resolution was adopted:

Resolved, That the Special Committee on Education be continued, and be requested to report next year to the Society what is feasible to be done to test the competency of graduates of various medical colleges who hereafter seek to settle in this State.

On motion of Dr. Hunt, it was

Resolved, That a committee of three be appointed by the President to report this afternoon what, in its judgment, can, or ought to be done by county medical societies, or by local officers, to prevent unlicensed persons who record imperfect licenses from practicing in this State.

The President appointed the following named gentlemen to constitute the committee: Drs. Parrish, Pennington, and Welch.

Dr. Garretson, in behalf of the Committee on Medical Jurisprudence, read its report, which, after considerable discussion, was, on motion, referred back to the Committee for amendments.

On motion of Dr. Hunt, the following was adopted:

Resolved, That this Society recognizes the importance of some legislation as to the modes of securing expert testimony.

Dr. B. A. Watson, Chairman of the Committee on Army Medical Museum and Library of Surgeon-General's Office, made a complete report, appended to which were the following:

WHEREAS, It is the opinion of the Medical Society of New Jersey that the Army Medical Museum and Library of the Surgeon-General's office, at Washington, D. C., have been largely instrumental in the advancement of sound professional and scientific knowledge, and that they give promise of still greater usefulness in the future. And

WHEREAS, It is learned with regret that both these collections are in great jeopardy from fire or accident through the insecurity and unsuitableness of the building in which they are stored; it is

Resolved, That Congress be respectfully urged to provide suitable, indestructible quarters for these invaluable treasures, to secure them against any possible contingency of loss or damage.

Resolved, That it is the sense of this meeting that the management of these national collections has been eminently successful in the past, and that any change of administration would not only be injurious to these interests, but would cast an undeserved stigma upon the office of the Surgeon-General of the army.

Resolved, That we again respectfully petition Congress to provide suitable annual appropriations for the increase and preservation of the Museum and Library, and also for carrying on the valuable "Index Catalogue" of the Surgeon-General's office.

Resolved, That a committee of three be appointed by the Chairman of this Society to prepare a suitable memorial, which shall be printed and sent to each of our representatives in Congress.

The President appointed Drs. B. A. Watson, H. G. Taylor, and E. M. Hunt, as the committee.

The report of the Committee on Lunacy was read by its chairman, Dr. Parrish, and the following resolutions, which were offered by the committee, were, on motion of Dr. Benjamin, adopted:

WHEREAS, The Legislature of the State of New Jersey, having, at its session of 1883, passed an act entitled "An Act to Create a Council of State Charities and Correction;" it is deemed of such importance to the health and well-being of the people as to call for congratulations by the Medical Society of New Jersey; therefore,

Resolved, That the Medical Society of New Jersey, in annual meeting assembled at Cape May, June 10 and 11, 1884, welcome the appointment by the Governor of the State of a Council of State Charities and Correction as an additional and co-operative factor with the Medical Society in correcting the neglects and abuses to which the insane poor of the State are subjected, especially in the county almshouses throughout the State.

Resolved, That in congratulating the community upon the existence of such a council, the Medical Society of the State, the district societies in the different counties, and individual physicians in their respective homes, will cheerfully co-operate with said Council in all suitable and legitimate plans to secure the result contemplated by law.

Resolved, That the corresponding secretary be instructed to transmit to said Council a copy of these resolutions, with a copy also of the *Transactions* of this annual meeting when they shall be published.

Dr. C. J. Kipp then read an essay on the "Prevention and Treatment of Purulent Conjunctivitis." He believes this disease is always due to inoculation, and may be prevented by the employment of prophylactic measures. He thinks there is reason to believe that the disease is frequently induced by inoculation of the conjunctiva by leucorrhœal fluid during parturition, and therefore it might often be prevented by repeated injections of tepid water into the vagina during the first stages of parturition. In the treatment of the disease, he recommends cleanliness, application of cold to the lids in the early stage, and the application of a solution of nitrate of silver later on. Prefers absorbent cotton to sponge in wiping away discharges. The eyes should be opened and cleaned at least every hour.

Dr. Geo. T. Welch, of Keyport, followed with

an essay on, "Many Drugs: Few Remedies." He said:

"The modern physician in his multitudinous drugs finds few remedies. The average of human life is greater, but commerce and the arts have given greater comfort, better food, new thoughts, wider horizons, and none of the sciences can claim too great a share in the world's advancement. Medicine finds its highest achievements in the prevention, not in the cure of disease. Cancer shows a steady relative increase in England: in New Jersey the average death-rate from this disease is 1 in 54 of all the deaths that occur. Malarial diseases spread in wider circles. Does not the ravage of tuberculosis go on? Who has won eminence in curing yellow fever? The exanthemata sweep into and out of every neighborhood about once in five years. Who cures rheumatism, or typhoid fever, or chronic Bright's disease? Who never recoiled before a patient simmering in the horrible slow flame of pyæmia? And yet who refrains from prescribing? The journals teem with fortunate prescriptions, the nostrums of manufacturing chemists push braggart charlatanism to the wall. No monstrosity of theirs so impudent that a dozen college professors will not laud the mixture. This was once the province of the clergy, but we do things differently now.

"The decadence of drugs once high in esteem, and the discovery of the parasitic cause of many diseases, should make us skeptical of medicines and their applications, rather than enthusiastic in heralding the new. But a large body of medical men lend themselves to this insanity, and the commercial class keeps up the hue and cry, out of no philanthropy, but to fatten on the weakness of the profession, and the misfortunes of the race.

"The young doctor believes in the magic of drugs, the old doctor regards the majority of them as mischievous, while the pathologist suspects them all. We hear of the so-called cures, but rarely do we hear of the failures. Truth can never be arrived at until both sides are known. As to the drugs, most of them are poisons. Solutions of the majority of them destroy plants, and corrode the vital organs of animals. The test of new drugs upon animals, and the argument from these to man, is in many instances highly fallacious. Such drugs as morphia and atropia have slender effects on birds and herbivorous animals, while many others have frequently toxic effects, without corresponding symptoms in man. As, for instance, citric and tartaric acids, camphor, cocculus, dulcimara, and liq. ammon. acet., poison fatally in their order cats, rabbits, dogs, and fish. Some drugs act differently upon different animals, as colocynth, which has feeble action on horses, sheep, and swine, while it purges dogs and rabbits violently; cyclamen poisons fish, while pigs can eat any quantity of the root; hyoseyamus is eaten without harm by hogs, and does not injure sheep or cows, while upon dogs it has much the same effect as upon man.

"The only way to arrive at the average merit of new drugs, or the old, is to record the results of their application in the same classes of disease, under the varying conditions of hygienic surroundings over vast areas. But this is not practicable, for the majority of physicians are plodders, followers, men of routine. One other means

presents itself, colléges of experimental medicine, conducted under the eyes of the State, or the supervision of the highest medical authorities. Here should be rigorous system, exact registration, frequent comparison and correction. At the same time we must recollect, for all our attainments, that but comparatively little is known of the natural history of diseases. The tendency of nature to remedy ills without interference would astound the medical world could it be known aright. Hundreds of diseases would end in recovery if never a drug were given. We deceive ourselves with cures. The last drug gets the credit, where none deserves it. On the other hand, many diseases have continued to be incurable for ages, though even the wisest physician would probably feel himself criminal not to prescribe something. And given one thing, to give another is a natural sequence.

"Even to give an ample margin, after twenty-five leading medicines, as iron, iodine, quinine, strychnine, brandy, and opium, have been selected from the mass of drugs persistently thrust upon the profession, the rest might be 'in the flat sea sunk,' and the death-rate be no greater."

Drs. Thomas A. Emmett and Isaac Taylor, of New York, having been duly recommended by the committee, were unanimously elected honorary members of this Society.

It was voted that the Business Committee of last year be continued.

The Committee on Honorary Membership was also continued.

Drs. O'Hara and W. B. Ulrich, delegates from the Medical Society of Pennsylvania, made brief and appropriate responses to their formal presentation.

A petition from the physicians of Cape May, asking for a commission to organize a medical society in that county, was received, and, on motion, it was ordered that the commission be granted.

Drs. Wickes, W. P. Watson, and E. M. Hunt, are the Committee on Fellows' Prize Essay. The Committee were instructed to select a subject for the essay, and publish the same in the medical press.

The following officers were elected for 1884:

President.—P. C. Barker.

First Vice-President.—Jos. Parrish.

Second Vice-President.—C. J. Kipp.

Third Vice-President.—J. W. Ward.

Recording Secretary.—Wm. Pierson, Orange.

Corresponding Secretary.—Wm. Elmer, Trenton.

Treasurer.—W. W. L. Phillips, Trenton.

Standing Committee.—T. J. Smith, E. J. Marsh, D. C. English.

DELEGATES.

American Medical Association—J. H. Pugh, J. W. Snowden, I. H. Love, Wm. Pierson, W. P. Watson, H. C. Clark, Wm. Elmer, D. B. Ingersoll, D. C. English, J. E. Avison, A. W. Rogers, I. Gibbon, W. H. Merrill, J. W. Paul, J. M. Beam.

Pennsylvania Medical Society—T. R. Varick, Joseph Parrish, E. Busby.

Connecticut Medical Society—N. Williamson, H. G. Buckingham, C. R. Wiley.

Rhode Island Medical Society—H. H. James, E. H. Reily, M. Abel.

Massachusetts Medical Society—E. W. Hunt, H. M. Weeks, P. A. Harris.

Maine Medical Society—J. H. Griffith, E. Worth, J. L. Bodine.

Vermont Medical Society—D. M. Forman, P. Hoffman, D. Benjamin.

Delaware Medical Society—G. T. Welch, W. H. Amos, E. Oliphant.

New York Medical Society—J. S. Green, D. B. Ingersoll, J. S. Whitaker.

British Medical Association and International Medical College—E. M. Hunt, J. N. Quimby, S. S. Clark.

It was voted that the next annual meeting of this society be held at Long Branch, on the second Tuesday in June, 1885.

Dr. H. H. James was appointed essayist for the next meeting.

It was voted that the assessment next year be one dollar and a half per capita.

The President appointed the following Committee of Arrangements for the next annual meeting: S. H. Hunt, H. R. Baldwin, D. M. Forman, W. H. Shippis, Henry Mitchell.

On motion of Dr. Godfrey, the following was adopted:

Resolved, That a vote of thanks be extended to the officers of the West Jersey R. R. Co., to Mr. McClellen, the proprietor of the Stockton Hotel, the mayor and citizens of Cape May, for their generous hospitality and courtesy to the members of this society, and to Committee of Arrangements.

Resolved, That the Corresponding Secretary be instructed to inform them of the passage of this resolution.

Adjourned.

Buddhism and the Transmission of Diseases.

The Buddhist law is significantly stringent on this point—so much so that, according to Jardine's translations of the Burman's law of "Marriage and Divorce," we observe that, should man or woman unwittingly marry into a family afflicted with certain hereditary diseases, as leprosy, cancer, syphilis, madness, etc., which in the Dhammathat relating to marriage are collectively designated "*hinaroga*, or wasting diseases," he or she may sue out a divorce. Buddhists are taught to believe that not only will the children of diseased parents inherit a transmissible disease, but that the husband or wife will contract the same by association—living together under the same roof.

Personal.

—Dr. Carl Seiler, of this city, will be the efficient resident physician at the "Mountain House," Cresson Springs, this summer.

MARRIAGES.

GARRETSON—ZELLER.—At the residence of the bride's mother, on Tuesday evening, June 10, 1884, Dr. Will M. Garretson and Miss Maggie Zeller, both of Perkinsville, Ind.

PRATT—JACKSON.—At Bellefontaine, Logan county, Ohio, June 5, 1884, by Rev. Newton, Dr. Lester C. Pratt and Miss Sallie M. Jackson.

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